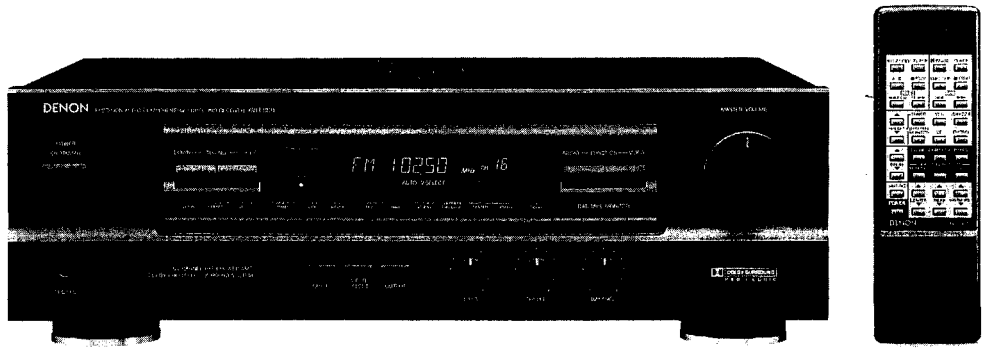
DENON

Hi-Fi AV Surround Receiver

MODEL AVR-800

AV SURROUND RECEIVER



NIPPON COLUMBIA CO., LTD.

(U.S.A. AND CANADA MODELS.) SPECIFICATIONS

- **Audio Section** — **for North America model**

(Power amplifier)	Front (main 2ch driven)	
Rated output:	60 W + 60 W	(8 ohms, 20 Hz – 20 kHz with 0.08% THD)
(All properties shown are	CENTER (center 1ch driven)	
only for the power	60 W	(8 ohms, 20 Hz – 20 kHz with 0.08% THD
amplifier stage.)	REAR (rear 2ch driven)	
	15 W + 15 W	(8 ohms, 1 kHz with 0.3% THD)
Output terminals:	Front:	6 to 16 ohms
	Center:	8 to 16 ohms
	Rear:	8 to 16 ohms
Line input (Each line input – FRONT SP OUT)		
Input sensitivity / impedance:	150 mV / 47 k ohms	PHONO (MM): 2.5 mV / 47 kohms
Frequency response:	10 Hz to 50 kHz:	±3 dB
Tone control range:	BASS:	±10 dB at 100 Hz
	TREBLE:	±10 dB at 10 kHz
Signal-to-noise ratio	92 dB (BYPASS)	
Phono equalizer (PHONO input – REC OUT)		
RIAA deviation:	±1 dB (20 Hz to 20 kHz)	
Signal-to-noise ratio:	74 dB (A weighting, with 5 mV input)	
Rated output / Maximum output:	150 mV / 8 V	
Distortion factor:	0.03% (1 kHz, 1 V)	

- **Tuner Section**

[FM] **(note:** μV at 75 ohms, 0 dBf = 1 × 10^{-15} W)		
Receiving Range:	87.5 MHz ~ 108.0 MHz (for North America model)	
	87.50 MHz ~ 108.00 MHz (for multi-voltage model)	
Usable Sensitivity:	1.0 μV (11.2 dBf)	
50 dB Quieting Sensitivity:	MONO	1.6 μV (15.3 dBf)
	STEREO	23 μV (38.5 dBf)
Signal to Noise Ratio (IHF-A):	MONO	80 dB
	STEREO	75 dB
Total Harmonic Distortion	MONO	0.15%
(at 1 kHz):	STEREO	0.3%
[AM]		
Receiving Range:	520 kHz ~ 1710 kHz (for North America model)	
	522 kHZ ~ 1611 kHz (for multi-voltage model)	
Usable Sensitivity:	18 μV	
Signal to Noise Ratio:	50 dB	

- **Video Section**

Standard video jacks	
Input and output level / impedance:	1 Vp-p / 75 ohms
Frequency response:	2 Hz to 8 MHz +0, –3 dB

- **General**

Power supply:	AC 120 V, 60 Hz (for North America model)
	AC 110/220 V, 50/60 Hz (for multi-voltage model)
Power consumption:	4.0 A (for North America model)
	W (for multi-voltage model)
Maximum external dimensions:	434 (W) × 142 (H) × 325 (D) mm (17-3/32" × 5-19/32" × 12-51/64")
Weight:	9.1 kg (20 lbs 1 oz)

- **Remote control unit**

System remote control		
RC-169:	Total buttons:	36
	DENON system code	
	CD player:	6 buttons
	Cassette deck:	6 buttons
	AVR-800 fixed codes:	24 buttons
	Batteries:	R6P/AA Type (two batteries)
	External dimensions:	55 (W) × 18 (H) × 180 (D) mm (2-11/64" × 45/64" × 7-3/32")
	Weight:	110 g (Approx. 4 oz) (including batteries)

* For purposes of improvement, specifications and design are subject to change without notice.

1 INTRODUCTION

SAFETY PRECAUTIONS

CAUTION

RISK OF ELECTRIC SHOCK

DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

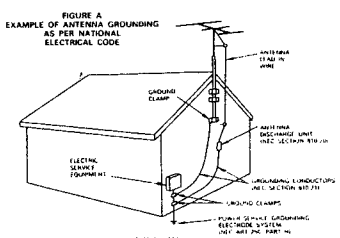
CAUTION	ATTENTION
TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.	POUR PREVENIR LES CHOCS ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.

SAFETY INSTRUCTIONS

1. Read Instructions – All the safety and operating instructions should be read before the appliance is operated.
2. Retain Instructions – The safety and operating instructions should be retained for future reference.
3. Heed Warnings – All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow Instructions – All operating and use instructions should be followed.
5. Water and Moisture – The appliance should not be used near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.
6. Carts and Stands – The appliance should be used only with a cart or stand that is recommended by the manufacturer.

6A. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

7. Wall or Ceiling Mounting – The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
8. Ventilation – The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
9. Heat – The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
10. Power Sources – The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
11. Grounding or Polarization – Precautions should be taken so that the grounding or polarization means of an appliance is not defeated.



12. Power-Cord Protection – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
14. Cleaning – The appliance should be cleaned only as recommended by the manufacturer.
15. Power Lines – An outdoor antenna should be located away from power lines.
16. Outdoor Antenna Grounding – If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna-discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure A.
17. Nonuse Periods – The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
18. Object and Liquid Entry – Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
19. Damage Requiring Service – The appliance should be serviced by qualified service personnel when:
    A. The power-supply cord or the plug has been damaged; or
    B. Objects have fallen, or liquid has been spilled into the appliance; or
    C. The appliance has been exposed to rain; or
    D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
    E. The appliance has been dropped, or the enclosure damaged.
20. Servicing – The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

2 NAMES OF PARTS
(Front Panel)

BEZEICHNUNG DER TEILE
(Frontplatte)

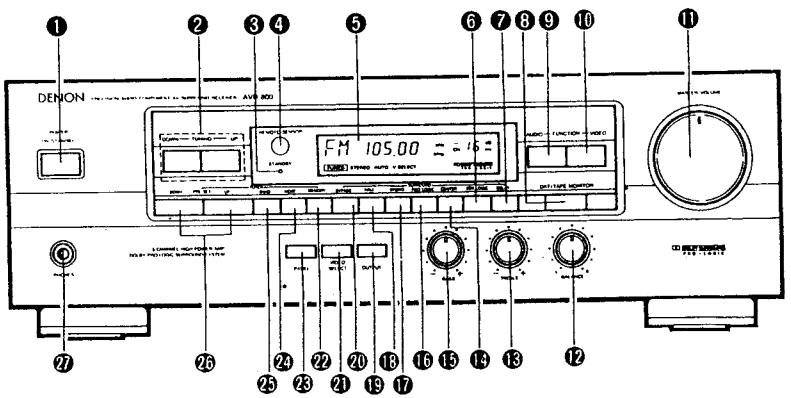
NOMENCLATURE
(Panneau avant)

OMENCLATURA
(Pannello anteriore)

NOMBRE DE LAS PARTES
(Panel delantero)

NAMEN VAN ONDERDELEN
(Voorpaneel)

DE OLIKA DELARNAS NAMN
(Frontpanel)



FOR ENGLISH READERS
1. POWER BUTTON
2. TUNING BUTTONS
3. STANDBY LED
4. REMOTE CONTROL SENSOR
5. MFD (Multi-function fluorescent display)
6. 3CH. LOGIC MODE BUTTON
7. DELAY TIME BUTTON
8. DAT/TAPE MONITOR BUTTON
9. AUDIO FUNCTION BUTTON
10. VIDEO FUNCTION BUTTON
11. MASTER VOLUME
12. BALANCE control
13. TREBLE control
14. CENTER MODE BUTTON
15. BASS control
16. DOLBY PRO LOGIC MODE BUTTON
17. STUDIO MODE BUTTON
18. HALL MODE BUTTON
19. OUTPUT BUTTON
20. BYPASS BUTTON
21. VIDEO SELECT BUTTON
22. MEMORY BUTTON
23. PANEL BUTTON
24. TUNING MODE BUTTON (Tuning Mode Selector Switch)
25. TUNING BAND BUTTON (Tuning Band Selector Switch)
26. TUNER PRESET BUTTONS
27. PHONES JACK

FÜR DEUTSCHE LESER
1. Netztaste (POWER)
2. Abstimmtasten (TUNING)
3. Bereitschaftsanzeige (STANDBY LED)
4. Sensor für Fernbedienung
5. Multi-Funktions-Display (MFD)
6. 3-Kanal Logik-Modus-Taste (3CH. LOGIC MODE)
7. Zeitverzögerungstaste (DELAY TIME)
8. DAT-/Cassettendeck-Überwachungstaste (DAT/TAPE MONITOR)
9. Audio-Funktionstaste (AUDIO FUNCTION)
10. Video-Funktionstaste (VIDEO FUNCTION)
11. Hauptlautstärke (MASTER VOLUME)
12. Balance-Steuerung (BALANCE)
13. Höhen-Steuerung (TREBLE)
14. Mittel-Modus Taste (CENTER MODE)
15. Bass-Steuerung (BASS)
16. Dolby-Pro Logik-Modus Taste (DOLBY PRO LOGIC MODE)
17. Taste für Studio-Modus (STUDIO MODE)
18. Taste für Saal-Modus (HALL MODE)
19. Ausgangstaste (OUTPUT)
20. Bypass-Taste (BYPASS)
21. Videoauswahl-Taste (VIDEO SELECT)
22. Speichertaste (MEMORY)
23. Konsolentaste (PANEL)
24. Abstimmungsmodus-Taste (TUNING MODE) (Abstimmungsmodus-Wahlschalter)
25. Abstimmungsband-Tasten (TUNING BAND) (Abstimmungsband-Wahlschalter)
26. Tuner-Voreinstellungs-Tasten (TUNER PRESET)
27. Kopfhörerbuchsen (PHONES JACK)

POUR LES LECTEURS FRANCAIS
1. TOUCHE D'ALIMENTATION (POWER)
2. TOUCHES DE SYNTONISATION (TUNING)
3. TEMOIN DE VEILLE (STANDBY LED)
4. DETECTEUR DE TELECOMMANDE
5. MFD (Affichage fluorescent multi-fonction)
6. TOUCHE DE MODE LOGIQUE 3 CANAUX (3CH. LOGIC MODE)
7. TOUCHE DE RETARD (DELAY TIME)
8. TOUCHE DAT/CONTROLE DE BANDE (DAT/TAPE MONITOR)
9. TOUCHE DE FONCTION AUDIO (AUDIO FUNCTION)
10. TOUCHE DE FONCTION VIDEO (VIDEO FUNCTION)
11. Commande de VOLUME GLOBAL (MASTER VOLUME)
12. Commande d'équilibre (BALANCE)
13. Commande des aigues (TREBLE)
14. TOUCHE DE MODE CENTRAL (CENTER MODE)
15. Commande de graves (BASS)
16. TOUCHE DOLBY PRO LOGIC MODE
17. TOUCHE DE MODE STUDIO
18. TOUCHE DE MODE SALLE (HALL)
19. TOUCHE DE SORTIE (OUTPUT)
20. TOUCHE DE DERIVATION (BYPASS)
21. TOUCHE DE SELECTION VIDEO (VIDEO SELECT)
22. TOUCHE DE MEMOIRE (MEMORY)
23. TOUCHE DE PANNEAU (PANEL)
24. TOUCHE DE MODE DE SYNTONISATION (TUNING MODE) Sélecteur de mode de syntonisation)
25. TOUCHE DE GAMME DE SYNTONISATION (TUNING BAND) (Sélecteur de gamme de syntonisation)
26. TOUCHES DE PREREGLAGE DE TUNER (TUNER PRESET)
27. PRISE CASQUE (PHONES)

PER IL LETTORE ITALIANO
1. TASTO DI ACCENSIONE
2. TASTI DI SINTONIZZAZIONE
3. LED DI ATTESA
4. SENSORE A DISTANZA
5. Display MFD (display fluorescente multifunzione)
6. TASTO DEL MODO 3CH. LOGIC
7. TASTO DELLA DURATA DEL RITARDO
8. Tasto di monitoraggio della piastra DAT/piastra a cassette (DAT/TAPE MONITOR)
9. TASTO DI FUNZIONE AUDIO
10. TASTO DI FUNZIONE VIDEO
11. VOLUME PRINCIPALE
12. CONTROLLO DEL BILANCIAMENTO
13. CONTROLLO DEGLI ACUTI
14. TASTO DEL MODO CENTRALE
15. CONTROLLO DEI BASSI
16. TASTO DEL MODO DOLBY PRO LOGIC
17. TASTO DEL MODO STUDIO
18. TASTO DEL MODO HALL
19. TASTO DI USCITA
20. TASTO BYPASS
21. TASTO DI SELEZIONE VIDEO
22. TASTO DI MEMORIZZAZIONE
23. TASTO DEL DISPLAY
24. TASTO DEL MODO DI SINTONIZZAZIONE
25. TASTO DELLA BANDA DI SINTONIZZAZIONE
26. TASTI DI PRESELEZIONE DEL SINTONIZZATORE
27. PRESA DELLE CUFFIE

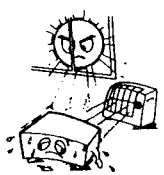
PARA LECTORES DE ESPAÑOL
1. INTERRUPTOR DE ALIMENTACION
2. BOTONES DE SINTONIZACION
3. LED DE MODO DE ESPERA
4. SENSOR DE CONTROL REMOTO
5. MFD (visualizador fluorescente multifunción)
6. BOTON SELECTOR DE MODO 3CH. LOGIC
7. BOTON SELECTOR DE TIEMPO DE RETARDO
8. BOTON DAT/TAPE MONITOR (DAT/TAPE MONITOR)
9. BOTON SELECTOR DE ENTRADA DE AUDIO
10. BOTON SELECTOR DE ENTRADA DE VIDEO
11. CONTROL PRINCIPAL DE VOLUMEN
12. Control de balance (BALANCE)
13. Control de tonos agudos (TREBLE)
14. BOTON SELECTOR DE MODO CENTRAL
15. Control de tonos bajos (BASS)
16. BOTON SELECTOR DE MODO DOLBY PRO LOGIC
17. BOTON SELECTOR DE MODO "STUDIO"
18. BOTON SELECTOR DE MODO "HALL"
19. BOTON DE SALIDA
20. BOTON DE OMISION
21. BOTON VIDEO SELECT
22. BOTON DE MEMORIA
23. BOTON DE INDICACION EN VISUALIZADOR
24. Interruptor selector de modo de sintonización (TUNING MODE)
25. Interruptor selector de banda de sintonización (TUNING BAND)
26. BOTONES DE PRESINTONIZACION
27. CONECTOR PARA AURICULARES

VOOR NEDERLANDSTALIGE LEZERS
1. SPANNINGSTOETS (POWER)
2. AFSTEMTOETSEN (TUNING)
3. STANDBY-AANDUIDING (STANDBY LED)
4. AFSTANDSBEDIENINGSSENSOR (REMOTE CONTROL SENSOR)
5. MFD (Multifunktionele lichtgevende display)
6. 3 KANAALS LOGIC-STANDTOETS (3 CH. LOGIC MODE)
7. VERTRAGINGSTIJDTOETS (DELAY TIME)
8. DAT/bandmeeluistertoets (DAT/TAPE MONITOR)
9. AUDIOFUNKTIETOETS (AUDIO FUNCTION)
10. VIDEOFUNKTIETOETS (VIDEO FUNCTION)
11. HOOFDVOLUME (MASTER VOLUME)
12. Balansregelaar (BALANCE)
13. Hoge tonen-regelaar (TREBLE)
14. MIDDENSTANDTOETS (CENTER MODE)
15. Lage-tonenregelaar (BASS)
16. DOLBY PRO LOGIC-STANDTOETS (DOLBY PRO LOGIC MODE)
17. STUDIOSTANDTOETS (STUDIO MODE)
18. CONCERTZAAL-STANDTOETS (HALL MODE)
19. UITVOERTOETS (OUTPUT)
20. NEGEERTOETS (BYPASS)
21. VIDEOKEUZETOETS (VIDEO SELECT)
22. GEHEUGENTOETS (MEMORY)
23. PANEELTOETS (PANEL)
24. AFSTEMSTANDTOETS (TUNING MODE) (Afstemstand-keuzeschakelaar)
25. GOLFBANDAFSTEMTOETS (TUNING BAND) (Golfband-afstemkeuzeschakelaar)
26. TUNER-VOORKEUZETOETSEN (TUNER PRESET)
27. HOOFDTELEFOONAANSLUITING (PHONES)

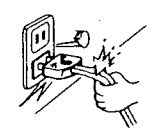
FÖR SVENSKA LÄSARE
1. Strömbrytare (POWER)
2. Avstämningstangenter (TUNING)
3. Beredskapsindikator (STANDBY)
4. Fjärrkontrollsensor (REMOTE CONTROL SENSOR)
5. MFD-display
6. Tangent för 3-kanalslogik (3CH. LOGIC MODE)
7. Tangent för reglering av tidsfördröjningen (DELAY TIME)
8. DAT-/DÄCKVÄLJARE (DAT/TAPE MONITOR)
9. Audiofunktionstangent (AUDIO FUNCTION)
10. Videofunktionstangent (VIDEO FUNCTION)
11. Ljudstyrkekontroll (MASTER VOLUME)
12. Balanskontroll (BALANCE)
13. Diskantkontroll (TREBLE)
14. Mittkanalsväljare (CENTER MODE)
15. Baskontroll (BASS)
16. DOLBY PRO LOGIC-tangent
17. STUDIO-tangent
18. HALL-tangent
19. Högtalaromkopplare (OUTPUT)
20. Förbikopplingstangent (BYPASS)
21. Videoväljare (VIDEO SELECT)
22. Minnestangent (MEMORY)
23. PANEL-tangent
24. Avstämningsomkopplare (TUNING MODE)
25. Frekvensbandväljare (TUNING BAND)
26. Snabbvalstangenter (TUNER PRESET)
27. Hörlursuttag (PHONES)

1 INTRODUCTION / EINFÜHRUNG / INTRODUCTION INTRODUZIONE / INTRODUCCIÓN / INLEIDING / INLEDNING

NOTE ON USE / HINWEISE ZUM GEBRAUCH / OBSERVATIONS RELATIVES A L'UTILISATION NOTE SULL'USO / NOTAS SOBRE EL USO / ALVORENS TE GEBRUIKEN / OBSERVERA

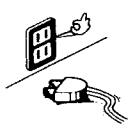


- Avoid high temperatures
  Allow for sufficient heat dispersion when installed on a rack.
- Vermeiden Sie hohe Temperaturen
  Beachten Sie, daß eine zureichende Luftzirkulation gewährleistet wird, wenn das Gerät auf ein Regal gestellt wird.
- Eviter des températures élevées
  Tenir compte d'une dispersion de chaleur suffisante lors de l'installation sur une étagère.
- Evitate di esporre l'unità a temperature alte.
  Assicuratevi che ci sia un'adeguata dispersione del calore quando installate l'unità in un mobile per componenti audio.
- Evite altas temperaturas
  Permite la suficiente dispersión del calor cuando está instalado en la consola.
- Vermijd hoge temperaturen.
  Zorg voor een degelijk hitteafvoer indien het apparaat op een rek wordt geplaatst.
- Undvik höga temperaturer.
  Se till att det finns möjlighet till god värmeavledning vid montering i ett rack.
- Evite temperaturas altas
  Conceda suficiente dispersão de calor quando o equipamento for instalado numa prateleira.

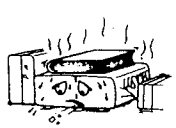


- Handle the power cord carefully.
  Hold the plug when unplugging the cord.
- Gehen Sie vorsichtig mit dem Netzkabel um.
  Halten Sie das Kabel am Stecker, wenn Sie den Stecker herausziehen.
- Manipuler le cordon d'alimentation avec précaution.
  Tenir la prise lors du débranchement du cordon.
- Manneggiate il filo di alimentazione con cura.
  Agite per la spina quando scollegate il cavo dalla presa.
- Maneje el cordón de energía con cuidado.
  Sostenga el enchufe cuando desconecte el cordón de energía.
- Hanteer het netsnoer voorzichtig.
  Houd het snoer bij de stekker vast wanneer deze moet worden aan- of losgekoppeld.
- Hantera nätkabeln varsamt.
  Håll i kabeln när den kopplas från el uttaget.
- Manuseie com cuidado o fio condutor de energia.
  Segure a tomada ao desconectar o fio.

- Keep the set free from moisture, water, and dust.
- Halten Sie das Gerät von Feuchtigkeit, Wasser und Staub fern.
- Protéger l'appareil contre l'humidité, l'eau et la poussière.
- Tenete l'unità lontana dall'umidità, dall'acqua e dalla polvere.
- Mantenga el equipo libre de humedad, agua y polvo.
- Laat geen vochtigheid, water of stof in het apparaat binnendringen.
- Utsätt inte apparaten för fukt, vatten och damm.
- Mantenha o aparelho livre de qualquer umidade, água ou poeira.

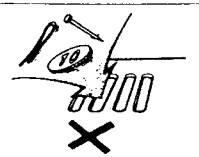


- Unplug the power cord when not using the set for long periods of time.
- Wenn das Gerät eine längere Zeit nicht verwendet werden soll, trennen Sie das Netzkabel vom Netzstecker.
- Débrancher le cordon d'alimentation lorsque l'appareil n'est pas utilisé pendant de longues périodes.
- Disinnestate il filo di alimentazione quando avete l'intenzione di non usare il filo di alimentazione per un lungo periodo di tempo.
- Desconecte el cordón de energía cuando no utilice el equipo por mucho tiempo.
- Neem altijd het netsnoer uit het stopkontakt wanneer het apparaat gedurende een lange periode niet wordt gebruikt.
- Koppla ur nätkabeln om apparaten inte kommer att användas i lång tid.
- Desligue o fio condutor de força quando o aparelho não tiver que ser usado por um longo período.

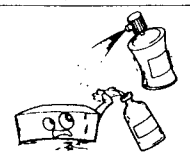


*(For sets with ventilation holes)

- Do not obstruct the ventilation holes.
- Die Belüftungsöffnungen dürfen nicht verdeckt werden.
- Ne pas obstruer les trous d'aération.
- Non coprite i fori di ventilazione.
- No obstruya los orificios de ventilación.
- De ventilatieopeningen mogen niet worden beblokkeerd.
- Tapp inte till ventilationsöppningarna.
- Não obstrua os orificios de ventilação.



- Do not let foreign objects in the set.
- Keine fremden Gegenstände in das Gerät kommen lassen.
- Ne pas laisser des objets étrangers dans l'appareil.
- E'importante che nessun oggetto è inserito all'interno dell'unità.
- No deje objetos extraños dentro del equipo.
- Laat geen vreemde voorwerpen in dit apparaat vallen.
- Se till att främmande föremål inte tränger in i apparaten.
- Não deixe objetos estranhos no aparelho.



- Do not let insecticides, benzene, and thinner come in contact with the set.
- Lassen Sie das Gerät nicht mit Insektiziden, Benzin oder Verdünnungsmitteln in Berührung kommen.
- Ne pas mettre en contact des insecticides, du benzène et un diluant avec l'appareil.
- Assicuratevi che l'unità non venga in contatto con insetticidi, benzolo o solventi.
- No permita el contacto de insecticidas, gasolina y diluyentes con el equipo.
- Laat geen insektenverdelgende middelen, benzine of verfverdunner met dit apparaat in kontakt komen.
- Se till att inte insektsmedel på spraybruk, bensen och thinner kommer i kontakt med apparatens hölje.
- Não permita que inseticidas, benzina e dissolvente entrem em contacto com o aparelho.

- Never disassemble or modify the set in any way.
- Versuchen Sie niemals das Gerät auseinander zu nehmen oder auf jegliche Art zu verändern.
- Ne jamais démonter ou modifier l'appareil d'une manière ou d'une autre.
- Non smontate mai, né modificate l'unità in nessun modo.
- Nunca desarme o modifique el equipo de ninguna manera.
- Nooit dit apparaat demonteren of op andere wijze modificren.
- Ta inte isär apparaten och försök inte bygga om den.
- Nunca desmonte ou modifique o aparelho de alguma forma.

• NUR FÜR EUROPÄISCHE MODELLE

Konformitätserklärung

Die DENON Electronic GmbH
Haiskestraße 32
4030 Ratingen 1

Erklärt als Hersteller/Importeur, daß das in dieser Bedienungsanleitung beschriebene Gerät den Technischen Vorschriften für Ton- und Fernseh-Rundfunkempfänger nach der Amtsblattverfügung 868/1989 (Amtsblatt des Bundesministers für Post und Telekommunikation vom 31. 8. 1989) entspricht.

"SERIAL NO. _____
PLEASE RECORD UNIT SERIAL NUMBER ATTACHED TO THE REAR OF THE CABINET FOR FUTURE REFERENCE"

(EUROPE MODEL) SPECIFICATIONS

- **Audio Section**

(Power amplifier)	Front (main 2ch driven)	
Rated output:	60 W + 60 W	(8 ohms, 20 Hz – 20 kHz with 0.1% THD)
(All properties shown are	CENTER (center 1ch driven)	
only for the power	60 W	(8 ohms, 20 Hz – 20 kHz with 0.1% THD
amplifier stage.)	REAR (rear 2ch driven)	
	15 W + 15 W	(8 ohms, 1 kHz with 0.5% THD)
Output terminals:	Front: 6 to 16 ohms	
	Center: 8 to 16 ohms	
	Rear: 8 to 16 ohms	
Line input (Each line input – FRONT SP OUT)		
Input sensitivity / impedance:	150 mV/47 k ohms	PHONO (MM): 2.5 mV / 47 kohms
Frequency response:	10 Hz to 50 kHz:	±3 dB
Tone control range:	BASS:	±10 dB at 100 Hz
	TREBLE:	±10 dB at 10 kHz
Signal-to-noise ratio	92 dB (BYPASS)	
Phono equalizer (PHONO input – REC OUT)		
RIAA deviation:	±1 dB (20 Hz to 20 kHz)	
Signal-to-noise ratio:	74 dB (A weighting, with 5 mV input)	
Rated output / Maximum output:	150 mV/8 V	
Distortion factor:	0.03% (1 kHz, 1 V)	

- **Tuner Section**

[FM] (note: μV at 75 ohms, 0 dBf = 1×10^{-15} W)		
Receiving Range:	87.50 MHz ~ 108.00 MHz	
Usable Sensitivity:	1.0 μV (11.2 dBf)	
50 dB Quieting Sensitivity:	MONO	1.6 μV (15.3 dBf)
	STEREO	23 μV (38.5 dBf)
Signal to Noise Ratio (IHF-A):	MONO	80 dB
	STEREO	75 dB
Total Harmonic Distortion	MONO	0.4%
(at 1 kHz):	STEREO	0.5%
[AM]		
Receiving Range:	522 kHZ ~ 1611 kHz	
Usable Sensitivity:	18 μV	
Signal to Noise Ratio:	50 dB	

- **Video Section**

Standard video jacks	
Input and output level / impedance:	1 Vp-p/75 ohms
Frequency response:	2 Hz to 8 MHz +0, –3 dB

- **General**

Power supply:	AC 230 V, 50 Hz (for Europe model)
	AC 240 V, 50 Hz (for U.K. model)
Power consumption:	200 W
Maximum external dimensions:	434 (W) × 142 (H) × 325 (D) mm (17-3/32" × 5-19/32" × 12-51/64")
Weight:	9.1 kg (20 lbs 1 oz)

- **Remote control unit**

System remote control		
RC-169:	Total buttons:	36
	DENON system code	
	CD player:	6 buttons
	Cassette deck:	6 buttons
	AVR-800 fixed codes:	24 buttons
	Batteries:	R6P/AA Type (two batteries)
	External dimensions:	55 (W) × 18 (H) × 180 (D) mm (2-11/64" × 45/64" × 7-3/32")
	Weight:	110 g (Approx. 4 oz) (including batteries)

* For purposes of improvement, specifications and design are subject to change without notice.

14 TROUBLESHOOTING

If a problem should arise, first check the following:
1. Are the connections correct?
2. Have you operated the amplifier according to the Operating Instructions?
3. Are the speakers, turntable, and other components operating properly?

If the receiver is not operating properly, check the items listed in the table below. Should the problem persist, there may be a malfunction. Disconnect the power immediately and contact your store of purchase.

	Symptom	Cause	Measures	Page
Common problems arising when listening to the CD, records, tapes, and FM broadcasts, etc.	MFD not lit and sound not produced when power switch set to on.	• Power cord not plugged in securely	• Check the insertion of the power cord plug.	8
	MFD lit but sound not produced.	• Speaker cords not securely connected. • OUTPUT button is off. • Improper position of the audio function button. • Volume control set to minimum. • MUTING is on.	• Connect securely. • Press the OUTPUT button. • Set to a suitable position. • Turn volume up to suitable level. • Switch off MUTING.	14 17 15 15 16
	–PROTECT– display appears multi-function display.	• Speaker terminals are short-circuited • Block the ventilation holes of the set. The unit is operating at continuous high power conditions and/or inadequate ventilation.	• Switch power off, connect speakers properly, then switch power back on. • Turn off the set's power, then ventilate it well to cool it down. Once the set is cooled down, turn the power back on.	14
	Sound produced only from one channel.	• Incomplete connection of speaker cords. • Incomplete connection of input/output cords. • Left/right balance is off.	• Connect securely. • Connect securely. • Adjust balance knob properly.	14 11~13 15
	Positions of instruments reversed during stereo playback.	• Reverse connections of left and right speakers or left and right input/output cords.	• Check left and right connections.	12~14
	Sound seems distorted.	• Rear level is too high.	• Set the rear level to lower level.	23, 25
	Personal memory function does not work.	• DAT/tape monitor mode set.	• Press the DAT/TAPE button to set the source.	17
When playing records	Humming noise produced when record is playing.	• Ground wire of turntable not connected properly. • Incomplete PHONO jack connection. • TV or radio transmission antenna nearby.	• Connect securely. • Connect securely. • Contact your store of purchase.	12 12 –
	Howling noise produced when volume is high.	• Turntable and speaker systems too close together. • Floor is unstable and vibrates easily.	• Separate as much as possible. • Use cushions to absorb speaker vibrations transmitted by floor. If turntable is not equipped with insulators, use audio insulators (commonly available).	– –
	Sound is distorted.	• Stylus pressure too weak. • Dust or dirt on stylus. • Cartridge defective.	• Apply proper stylus pressure. • Check stylus. • Replace cartridge.	–
	Volume is weak.	• MC cartridge being used.	• Replace with MM cartridge or use a head amplifier or step-up transformer.	12
Remote control unit	Receiver does not operate properly when remote control unit is used.	• Batteries dead. • Remote control unit too far from receiver. • Obstacle between receiver and remote control unit. • Different button is being pressed. • + and – ends of battery inserted in reverse.	• Replace with new batteries. • Move closer. • Remove obstacle. • Press the proper button. • Insert batteries properly	– 10 10 10

15 LAST FUNCTION MEMORY

- This receiver is equipped with a last function memory which stores the input and output setting conditions as they were immediately before the power is switched off.
  This function eliminates the need to perform complicated resettings when the power is switched on.
- This receiver is also equipped with a back-up memory. This function provides approximately one week of memory storage with the power cord disconnected.

16 SPECIFICATIONS

- **Audio Section** — **for North America model**
  (Power amplifier) — Front (main 2ch driven)
  Rated output: — 60 W + 60 W (8 ohms, 20 Hz – 20 kHz with 0.08% THD)
  (All properties shown are only for the power amplifier stage.) — CENTER (center 1ch driven)
  60 W (8 ohms, 20 Hz – 20 kHz with 0.08% THD
  REAR (rear 2ch driven)
  15 W + 15 W (8 ohms, 1 kHz with 0.3% THD)
  Output terminals: — Front: 6 to 16 ohms
  Center: 8 to 16 ohms
  Rear: 8 to 16 ohms
  Line input (Each line input – FRONT SP OUT)
  Input sensitivity / impedance: — 150 mV/47 k ohms PHONO (MM): 2.5 mV / 47 kohms
  Frequency response: — 10 Hz to 50 kHz: ±3 dB
  Tone control range: — BASS: +10 dB at 100 Hz
  TREBLE: ±10 dB at 10 kHz
  Signal-to-noise ratio — 92 dB (BYPASS)
  Phono equalizer (PHONO input – REC OUT)
  RIAA deviation: — ±1 dB (20 Hz to 20 kHz)
  Signal-to-noise ratio: — 74 dB (A weighting, with 5 mV input)
  Rated output / Maximum output: — 150 mV/8 V
  Distortion factor: — 0.03% (1 kHz, 1 V)

- **Tuner Section**
  [FM] (note: μV at 75 ohms, 0 dBf = 1 × 10^{-15} W)
  Receiving Range: — 87.5 MHz ~ 108.0 MHz (for North America model)
  87.50 MHz ~ 108.00 MHz (for multi-voltage model)
  Usable Sensitivity: — 1.0 μV (11.2 dBf)
  50 dB Quieting Sensitivity: — MONO 1.6 μV (15.3 dBf)
  STEREO 23 μV (38.5 dBf)
  Signal to Noise Ratio (IHF-A): — MONO 80 dB
  STEREO 75 dB
  Total Harmonic Distortion (at 1 kHz): — MONO 0.15%
  STEREO 0.3%
  [AM]
  Receiving Range: — 520 kHz ~ 1710 kHz (for North America model)
  522 kHZ ~ 1611 kHz (for multi-voltage model)
  Usable Sensitivity: — 18 μV
  Signal to Noise Ratio: — 50 dB

- **Video Section**
  Standard video jacks
  Input and output level / impedance: — 1 Vp-p/75 ohms
  Frequency response: — 2 Hz to 8 MHz +0, –3 dB

- **General**
  Power supply: — AC 120 V, 60 Hz (for North America model)
  AC 110/220 V, 50/60 Hz (for multi-voltage model)
  Power consumption: — 4.0 A (for North America model)
  W (for multi-voltage model)
  Maximum external dimensions: — 434 (W) × 142 (H) × 325 (D) mm (17-3/32" × 5-19/32" × 12-51/64")
  Weight: — 9.1 kg (20 lbs 1 oz)

- **Remote control unit**
  System remote control
  RC-169:

Total buttons:	36
DENON system code	
CD player:	6 buttons
Cassette deck:	6 buttons
AVR-800 fixed codes:	24 buttons
Batteries:	R6P/AA Type (two batteries)
External dimensions:	55 (W) × 18 (H) × 180 (D) mm (2-11/64" × 45/64" × 7-3/32")
Weight:	110 g (Approx. 4 oz) (including batteries)

* For purposes of improvement, specifications and design are subject to change without notice.

■ Using the Personal Memory

Surround mode settings and the input function can be stored at personal memory buttons "1" and "2", then recalled directly from any surround mode simply by pressing button "1" or "2".

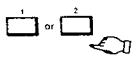
[1] Storing the setting in the personal memory

1. Set the desired surround mode and input function.
2. Press the personal memory button.

Remote control unit

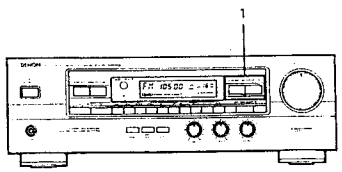
(The memory setting mode is set and the indicator on the MFD flashes.)

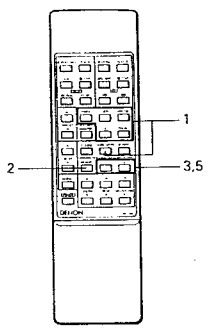
3. Press the desired personal memory button ("1" or "2").



Remote control unit

4. "M 1 (2) SET" appears on the MFD indicating that the setting has been stored.



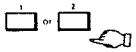


NOTE:

- The memory setting mode is set for 6 seconds. If any button other than personal memory button "1" or "2" is pressed, the memory setting mode is cancelled.

[2] Recalling the personal memory

5. Press the personal memory button ("1" or "2") at which the desired setting was stored.



Remote control unit

6. The surround mode and input function switch automatically.

NOTES:

- Personal memory buttons "1" and "2" will not function during the tape monitor mode.
- The surround mode recalled with the PERSONAL MEMORY "1" or "2" button is the same as the mode selected with the surround mode button. Thus, if the parameters of the surround mode which was stored in the memory are cleared, when the mode is recalled it is set to the initial values.
- Upon shipment from the factory, the "DOLBY PRO LOGIC" mode is stored at personal memory "1", the "HALL" mode at personal memory "2". The input function is set to VDP/DBS for both "1" and "2".
- Do not press personal memory buttons "1" or "2" buttons during recording on the cassette deck.

■ Operations Possible in the Various Surround Modes

The following is a list of the buttons and functions which can be operated during the different surround modes. Figures in parentheses indicate adjustment ranges.

		OUTPUT	CENTER LEVEL	REAR LEVEL	CENTER MODE	3CH LOGIC	TEST TONE	DELAY TIME
BYPASS		○	×	×	△[1]	×	×	×
DOLBY PRO LOGIC	NORMAL	○	○ (0~−24dB)	○ (0~−24dB)	○	○	○	○ (15~30ms)
	PHANTOM	○	×	○ (0~−24dB)	○	×	○	○ (15~30ms)
	WIDE	○	○ (0~−24dB)	○ (0~−24dB)	○	○	○	○ (15~30ms)
DOLBY 3CH LOGIC	NORMAL	○	○ (0~−24dB)	×	○	○	○	×
	WIDE	○	○ (0~−24dB)	×	○	○	○	×
HALL		○	×	○ (0~−24dB)	△[1]	×	×	○ (0~33ms)
STUDIO		○	×	○ (0~−24dB)	△[1]	×	×	○ (0~33ms)

○: Operation possible ×: Operation not possible

[1] Switches to the Dolby Pro (3CH) Logic for any modes other than Dolby Pro (3CH) Logic.
The level of the center and rear channels can be adjusted by 2 dB step.
The delay time can be set by 1.5 ms step.

- **The sound may be distorted for some sources if the rear level is raised during surround playback. If this happens, lower the rear level.**

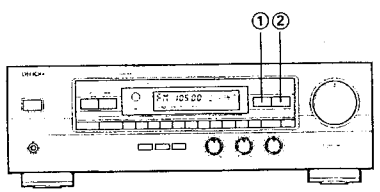
[13] INITIALIZATION OF THE MICROPROCESSOR

When the indication of the MFD display is not normal or when the operation of the unit does not shows the reasonable result, the initialization of the microprocessor is required by the following procedure.

1. Switch off the unit and remove the AC power cord from the wall outlet.
2. Hold the following 2 buttons of the main unit at the same time (as illustrated in the diagram below, ① AUDIO FUNCTION button, ② VIDEO FUNCTION button) and plug the power cord into the outlet.
3. Check that the entire MFD display is flashing with an interval of about 1 second, and release your fingers from the 2 buttons.
4. Switch on the unit and the microprocessor will be initialized. The input function is set to tuner with the bypass mode automatically.

NOTE:

- When the unit does not show the result of above 3 and 4, repeat the procedure from 1 again.
- When the microprocessor is initialized, all settings you have made are reset to the factory presettings.



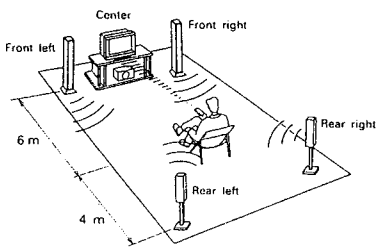
Initial parameter values for the different modes

	OUTPUT	CENTER LEVEL	REAR LEVEL	CENTER MODE	3CH LOGIC	DELAY TIME
BYPASS	ON	—	—	—	—	—
DOLBY PRO LOGIC	ON	-12dB	-12dB	NORMAL	OFF	21msec
HALL	ON	—	-12dB	—	—	21msec
STUDIO	ON	—	-12dB	—	—	21msec

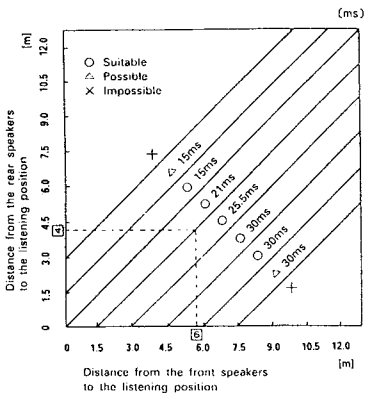
- INPUT FUNCTION : TUNER
- Reception band : FM
- Reception mode : AUTO
- Reception frequency : 87.5MHz (for North American models)
  : 87.50MHz (for multi-voltage models)
- PERSONAL MEMORY 1
  INPUT : VDP/DBS
  SURROUND MODE : DOLBY PROLOGIC
- PERSONAL MEMORY 2
  INPUT : VDP/DBS
  SURROUND MODE : HALL

• Setting the delay time

The optimum delay time will differ depending on the listening position. Referring to the chart at right, set the optimum delay time for your room's space and seating position. For example, when the distance from the front speakers to the listening position is 6 m and that from the rear speakers to the listening position is 4 m, the optimum delay time will be 21 ms.
The variable range of the delay time differs depending on the mode.
For details about the variable range, see Page 25.



Listening position and optimum delay time for playback with Dolby Pro Logic surround



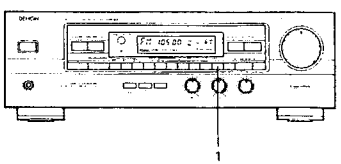
1. To increase the delay time.

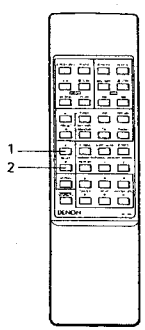
Main unit

Remote control unit

2. To decrease the delay time.

Remote control unit





- Once the delay time is set, there is no need to readjust it unless you change the speaker system or the listening position.
- It is available to memorize the adjusted values of delay time and rear (center) level for each surround mode.

➡ Continued

• Speaker volume adjustment and Dolby Pro Logic mode

To obtain the maximum surround effect, use the test tones to adjust the volume and balance of the speakers for the best balance for the listening position and so that the sound from all the speakers is heard at the same level.
Set the master volume control to a suitable level, then adjust using the following procedure.

1. Press the T.TONE button.

Remote control unit

Test tones are produced from the speakers in the order shown below, at 4 second intervals for the first two cycles, 2 second intervals after that.

→ FL → C → FR → S

For the Dolby 3CH Logic mode:

→ FL → C → FR

2. To increase the level of the center speakers.

Remote control unit

3. To decrease the level of the center speakers.

Remote control unit

4. To increase the level of the rear speakers.

Remote control unit

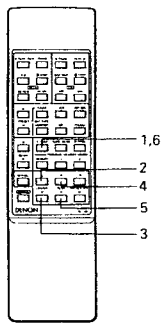
5. To decrease the level of the rear speakers.

Remote control unit

Cancelling

6. Press the T.TONE button again.

Remote control unit



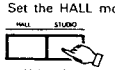
NOTES:

- The test tone will not move on to the next channel when it is being emitted from the center channel and the level of the center speakers is being adjusted, or when it is being emitted from the rear channel and the level of the rear speakers is being adjusted. It only moves on to the next channel approximately two seconds after the level key has been released.

■ Other Surround Modes

• HALL mode / STUDIO mode

1. Set the HALL mode / STUDIO mode.



Main unit

Remote control unit

HALL
↓
STUDIO
↓
DOLBY PRO LOGIC

2. Play the desired software.

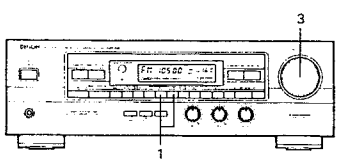
3. Adjust the volume.

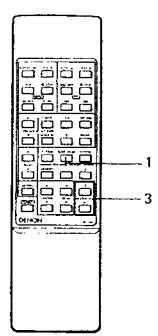
Main unit

Remote control unit

4. Adjust the level of the center and rear channels. Adjust the levels according to the source, using the Dolby Pro Logic settings as reference.

5. Adjust the delay time as desired.





12 SURROUND PLAYBACK

■ SURROUND modes

The surround modes are as follows:

1	Dolby Pro Logic	Use this when playing program sources recorded in Dolby Surround or Dolby stereo.
2	HALL	Use this setting to create the atmosphere of a concert hall. There will be no output from the center speaker.
3	STUDIO	Use this setting to create the atmosphere of watching a live program in a studio. There will be no output from the center speaker.

- **These effects may not be very pronounced for some sources.**
- **To adjust the speaker balance for the different surround modes, first adjust for the Dolby Pro Logic Surround mode as explained on page 23, then use the position of the center level and rear level controls at this time as a guide to adjust the balance for that surround mode.**

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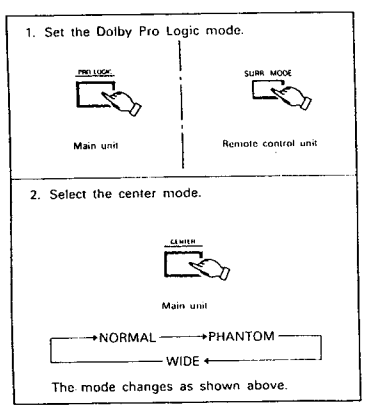
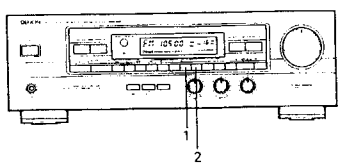
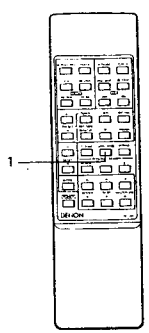
■ Using Dolby Pro Logic Surround

• Speaker disposition and the Dolby Pro Logic Center mode

Ideally, center speakers should be used when playing sources in Dolby Pro Logic Surround. Select the center mode according to your speaker system.

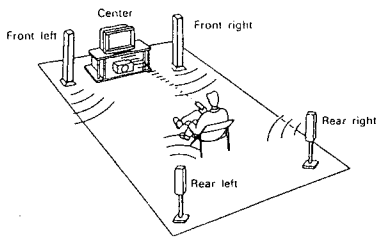






➡ Continued

Center Mode



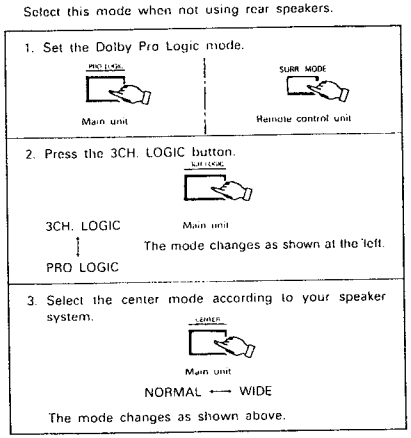
NORMAL mode
This mode is suited for an arrangement in which the center channel speaker is smaller than the left and right speakers. Signals below 100 Hz which have almost no effect on directional orientation are distributed to the left and right channels, whereas the center channel output signals greater than 100 Hz. As a result, the bass of the left and right channels increases the apparent deepness of the sound.

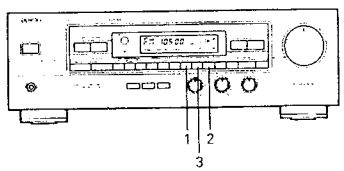
PHANTOM mode
Use this mode when center channel speaker is not used. A directional emphasis circuit provides signal reproduction which is electrically oriented to the center and this provides an exciting sound field for your enjoyment.

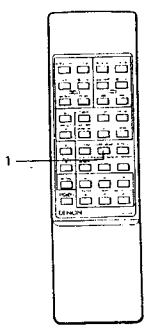
WIDE mode
This mode is suited for an arrangement in which the center channel speaker is of the same grade as the left and right speakers. The entire sound band from low region to high is output to the center channel to provide an exciting sound field for your enjoyment.

• Dolby 3CH. Logic (three-channel logic mode)

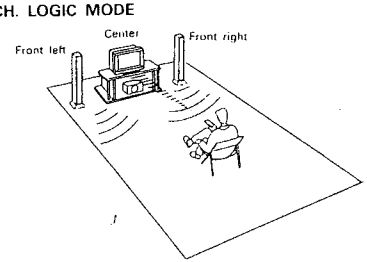
Select this mode when not using rear speakers.







3CH. LOGIC MODE



3CH. LOGIC mode
Use this mode when rear channel speakers are not used. The rear channel information is reproduced by the front speakers.

11 LISTENING TO THE RADIO

■ Tuning

1. Set the input function to "TUNER".

2. Select the reception band.

FM
↑
AM

There is a change as mentioned at the left, and indication ① inside the MFD changes.

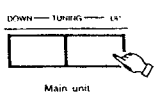
3. Select the tuning mode.

AUTO
↑
MANUAL

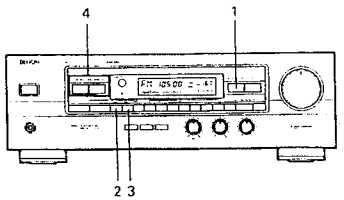
The mode switches as shown at the left. When the auto mode is set, "AUTO" lights on the MFD ④.

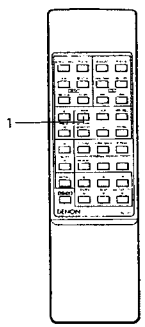
Set the auto mode for automatic tuning, the manual mode for manual tuning.

4. Tune in the station.

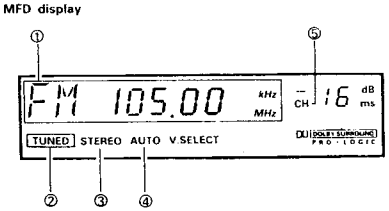


In the manual tuning mode:
Press the UP button once to increase the frequency by one step, the DOWN button once to decrease the frequency by one step.
The frequency changes continuously when the buttons are held in.
The "TUNED" indicator ② lights on the MFD when a station is tuned in.
In the auto tuning mode:
When the UP or DOWN button is pressed, automatic searching begins, and searching stops when a station is tuned in.





MFD display



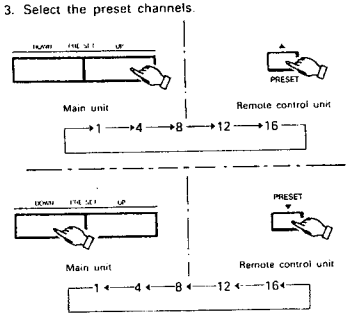
NOTES:
- When in the auto tuning mode on the FM band, the "STEREO" indicator ③ lights on the MFD when a stereo broadcast is tuned in. At open frequencies, the noise is muted and the "TUNED" ② and "STEREO" ③ indicators turn off.
- When the manual tuning mode is set, FM stereo broadcasts are received in monaural and the "STEREO" indicator ③ turns off.

■ Storing stations at the preset buttons

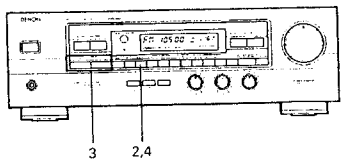
1. Follow steps 1 to 4 under "Tuning" to tune in a station.
2. Press the MEMORY button.

The "CH" ⑤ indicator on the MFD flashes.

3. Select the preset channels.



4. Press the MEMORY button that you want to store to memory.

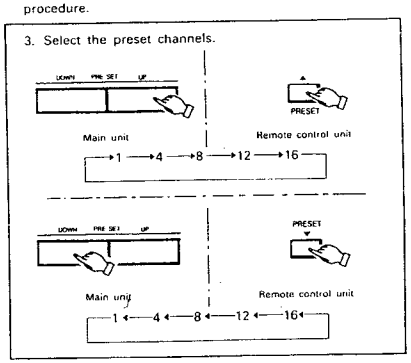


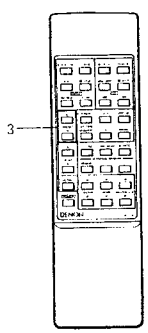
NOTES:
- The preset memory standby mode is set for 10 seconds when the MEMORY button is pressed.
- The preset memory standby mode is cancelled if any button other than preset buttons, the MEMORY button is pressed.

■ Recalling stations with the preset buttons

First store stations at the preset buttons using the above procedure.

3. Select the preset channels.





■ **Simulcast playback** (playing different video and audio sources simultaneously)

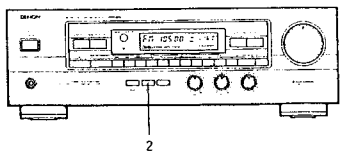
1. Follow steps 1 to 3 under "Playing the program source".
2. Press the VIDEO SELECT button until the desired video source is displayed on the MFD.

Main unit

VDP/DBS ↓ VCR

The source switches as shown above.

3. Follow steps 4 to 8 under "Playing the program source".



Cancelling simulcast playback

- Press the VIDEO SELECT button again.
- Press the video function button on the main unit or remote control unit.

■ **Using the muting function**

Use this to turn off the audio output temporarily.

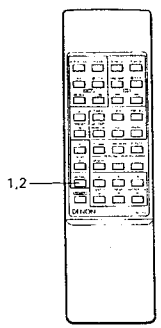
1. Press the MUTING button.

This function can only be set from the remote control unit.

Remote control unit

The STANDBY LED flashes when the muting function is set.

2. Press the MUTING button again.
The muting function is cancelled.



8 RECORDING

■ **Recording the program source**

(recording the source currently being monitored)

1. Follow steps 1 to 3 under "Playing the program source".
2. Start recording on the tape or video deck.
For instructions, refer to the component's operating instructions.

NOTE:

The recording source switches if the audio function, video function, personal memory "1" or "2" or tuner preset buttons are pressed during recording. Do not press these buttons during recording.

Simultaneous recording

The signals of the source selected with the function selector button are output simultaneously to the DAT/TAPE and VCR REC OUT jacks. If a total of two tape and/or video decks are connected and set to the recording mode, the same source can be recorded simultaneously on both decks.
In addition, if the TAPE MONITOR (DAT/TAPE) button is pressed, the audio signals from the tape deck are output to the VCR AUDIO REC OUT jacks.

9 TAPE MONITOR FUNCTION

■ **When playing a DAT or tape deck**

Use this function to switch between the DAT or tape deck and the input (source) selected with the audio or video function buttons.

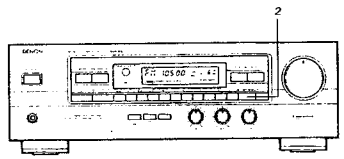
1. Follow steps 1 and 2 under "Playing the program source".
2. Select the deck to be played.

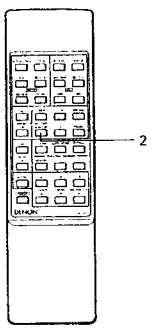
Main unit — Remote control unit

DAT/TAPE ↑ SOURCE

The source switches as shown at the left.

3. Follow steps 5 to 8 under "Playing the program source".





■ **Monitoring the recording on a three-headed tape deck**

The sound actually being recorded can be monitored during recording when a three-headed tape deck is used.

1. Select the deck to be monitored.

Main unit — Remote control unit

DAT/TAPE ↑ SOURCE

The source switches as shown at the left.

2. Follow steps 1 to 3 under "Playing the program source".
3. Start recording on the tape deck. For instructions, refer to the component's operating instructions.
4. Press the three-headed tape deck's source/tape button to monitor the recording.

NOTE:

- Also refer to the three-headed tape deck's operating instructions.

10 USING HEADPHONES

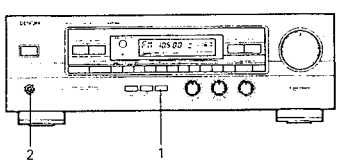
The sound from the speakers can be turned off using the OUTPUT button to listen to the sound over the headphones only, for example at night.

1. Press the OUTPUT button.

Main unit

"H/P ONLY" appears on the MFD.

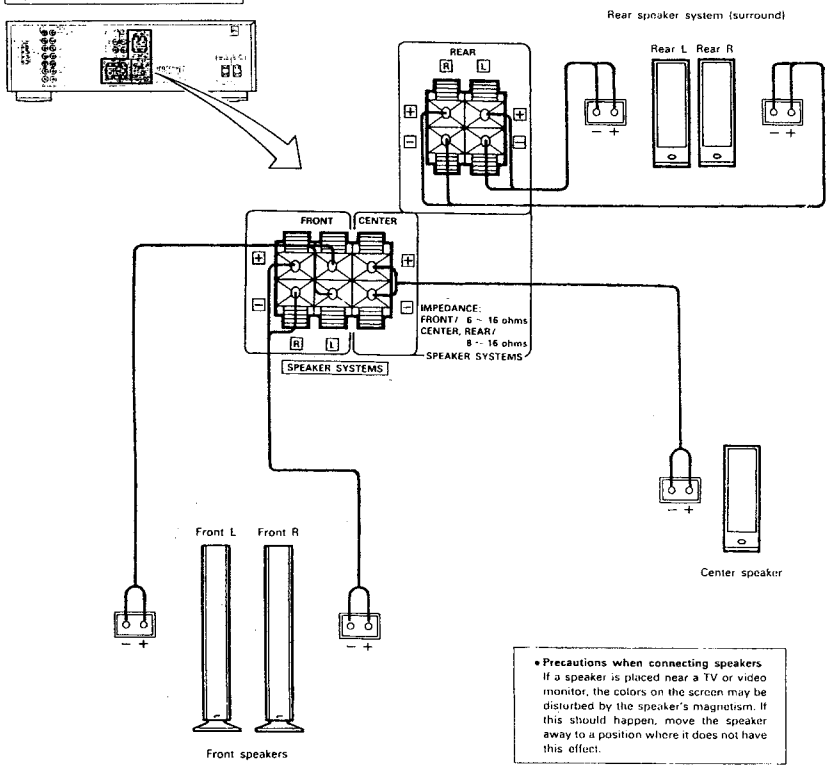
2. Insert the headphones' plug into the headphones' jack.



Cancelling

Either press the OUTPUT button again or press the POWER button to turn off the power.

Speaker System Connections



• Precautions when connecting speakers
If a speaker is placed near a TV or video monitor, the colors on the screen may be disturbed by the speaker's magnetism. If this should happen, move the speaker away to a position where it does not have this effect.

- This receiver can accommodate connections of a total of five speakers including one set of front speakers, one set of rear speakers, and one center speaker.
- Connect the speaker terminals with the speakers making sure that like polarities are matched (⊕ with ⊕, ⊖ with ⊖). Mismatching of polarities will result in weak central sound, unclear orientation of the various instruments, and the sense of direction of the stereo being impaired.
- When making connections, take care that none of the individual conductors of the speaker cord come in contact with adjacent terminals, with other speaker cord conductors, or with the rear panel.
- **Speaker Impedance**
  - Speakers with an impedance of 6 to 16 ohms can be connected for use as front speakers 8 to 16 ohms can be connected for use as center and rear speakers.
  - Using speakers with an impedance other than the specified one may result in damage. Be sure to use speakers of the specified impedance.

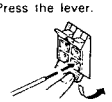
Preparing the cord

1. Peel off the sheath.

2. Twist the wires.

Connecting the center and rear speaker terminals.

1. Press the lever.



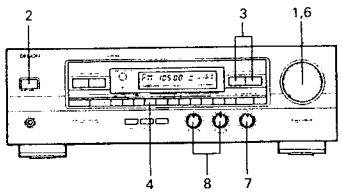
2. Insert the cord and release the lever.

➡ Continued

7 PLAYBACK

■ Preparations for Playback

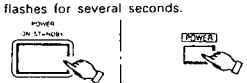
Check the connections
- Check that all connections are proper, referring to the connections diagrams (pages 10 to 14).



■ Playing the program source (normal stereo playback)

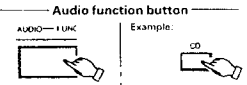
1. Set the MASTER VOLUME control to the minimum.

2. Press the POWER button to turn the power on.
The muting mode is set for several seconds, after which the STANDBY LED flashes for several seconds.



3. Select the source to be played.

Audio function button

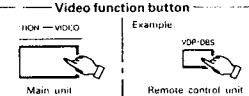


PHONO
↓
CD
↓
TUNER

The source switches as shown above MFD.

PHONO, CD or TUNER can be selected directly.

Video function button

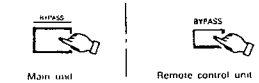


VDP/DBS
↓
VCR

The source switches as shown above MFD.

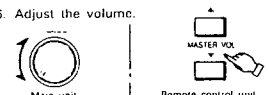
VDP/DBS and VCR can be selected directly.

4. Press the BYPASS button.



5. Start playback the source.
For instructions, refer to the source's operating instructions.

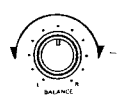
6. Adjust the volume.



Turn the control clockwise to increase the volume, counterclockwise to decrease it.

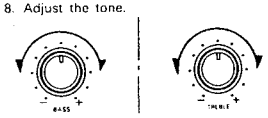
Press the ▲ button to increase the volume, the ▼ button to decrease it.

7. Adjust the left/right balance.



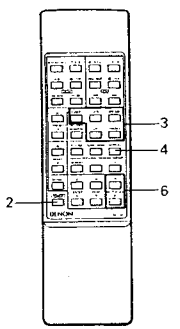
Turn the control counterclockwise to reduce the volume of the right channel, clockwise to reduce the volume of the left channel.

8. Adjust the tone.



Turn the control clockwise to increase the bass, counterclockwise to decrease it.

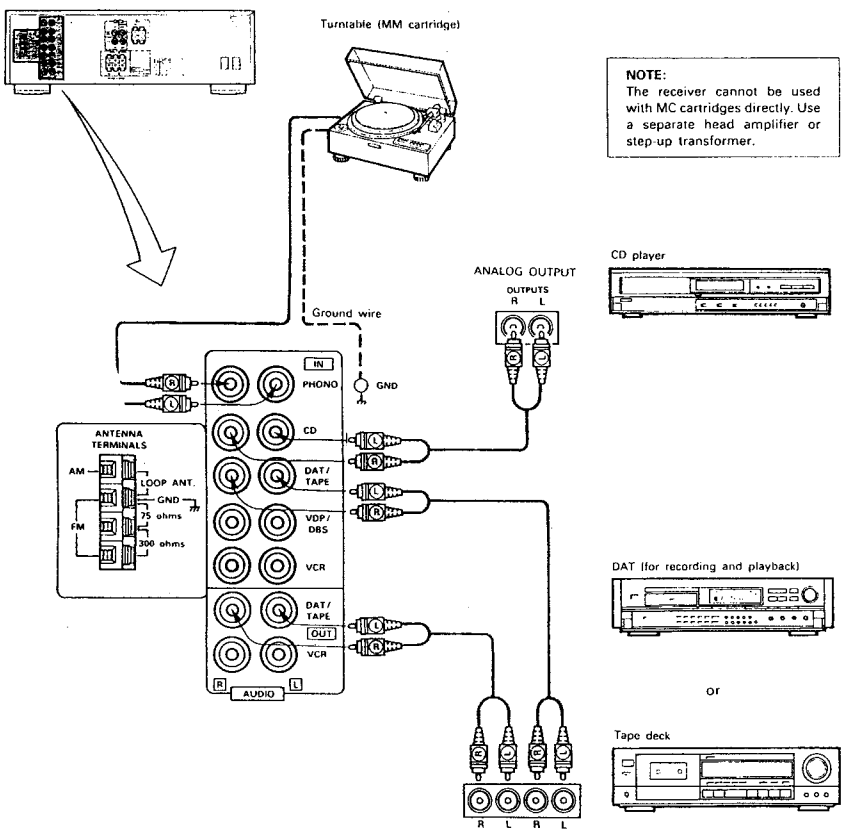
Turn the control clockwise to increase the treble, counterclockwise to decrease it.



NOTE:
The sound may be interrupted if switches are operated during playback. This is because the muting circuit is activated to prevent switching noise.

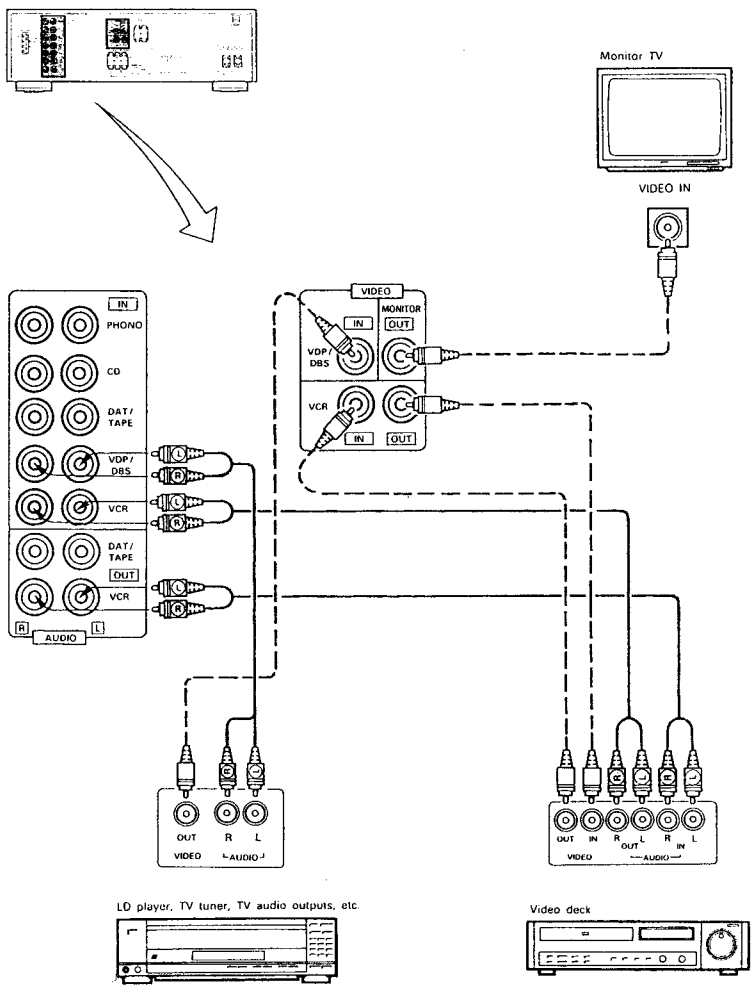
Audio Section

- Do not plug in the power cord until all connections have been completed.
- Be sure to connect the left and right channels properly (left with left, right with right).
- Insert the plugs securely. Incomplete connections will result in the generation of noise.
- Note that binding pin plug cords together with power cords or placing them near a power transformer will result in the introduction of hum or other noise.
- If hum or other noise is produced when the ground wire is connected, disconnect it.
- Noise or humming may be generated if a connected component is used independently without turning the power of the AVR-800 on. If this happens, turn on the power of the AVR-800.



➡ Continued

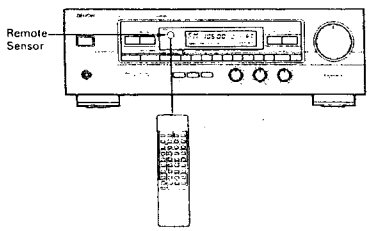
Video Section



5 REMOTE CONTROL UNIT

Following the procedure outlined below, insert the batteries before using the remote control unit.

■ Range of operation of the remote control unit



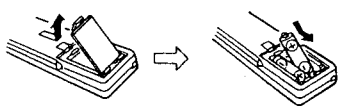
Point the remote control unit at the remote control sensor as shown on the diagram at the left.

NOTES:

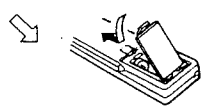
- The remote control unit can be used from a straight distance of approximately 7 meters, but this distance will shorten or operation will become difficult if there are obstacles between the remote control unit and the remote control sensor, if the remote control sensor is exposed to direct sunlight or other strong light, or if operated from an angle.
- Neon signs or other devices emitting pulse-type noise nearby may result in malfunction, so keep the set as far away from such devices as possible.

■ Inserting the batteries

1. Open the bottom cover of the remote control unit and remove the battery cover.



2. Insert the two R6P/AA batteries, matching the ⊕ and ⊖ marks on the batteries with those in the case. Close the bottom cover until it clicks shut.



NOTES

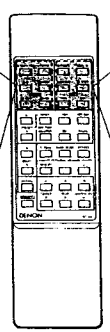
- Use only R6P, AA, UM-3 batteries for replacement.
- Be sure the polarities are correct. (See the illustration inside the battery compartment.)
- Remove the batteries if the remote control transmitter will not be used for an extended period of time.
- If batteries leak, dispose of them immediately. Avoid touching the leaked material or letting it come in contact with clothing, etc. Clean the battery compartment thoroughly before installing new batteries.
- When replacing the batteries, always replace both batteries with new ones.

■ System codes

The system codes for Denon tape decks and CD players are set in this remote control unit.

Tape deck system buttons
With these buttons, a Denon remote controllable tape deck can be controlled directly.
For details, refer to the tape deck's operating instructions. Note that operation may not be possible for some models.

- ▶ : Forward play
- ◀ : Reverse play
- ■ : Stop
- ◀◀ : Rewind
- ▶▶ : Fast-forward
- A/B : Switching between decks A and B for double decks



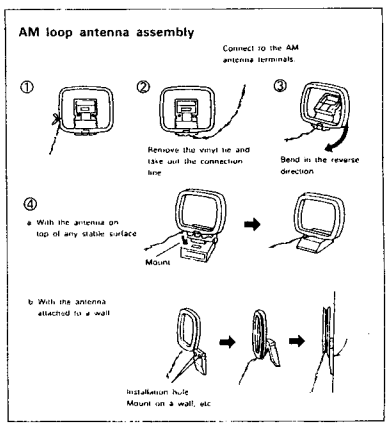
CD system buttons
With these buttons, a Denon remote controllable CD player can be controlled directly.
For details, refer to the CD player's operating instructions. Note that operation may not be possible for some models.

- ▶ : Play
- ❚❚ : Pause
- ■ : Stop
- ⏮ and ⏭ : Auto search (reverse and forward)
- DISC SKIP : CD changer, disc skip

➡ Continued

6 CONNECTIONS

Connecting the antenna terminals


AM loop antenna assembly
Connect to the AM antenna terminals.
①
②
③
Remove the vinyl tie and take out the connection line.
Bend in the reverse direction.
④
a With the antenna on top of any stable surface
Mount
b With the antenna attached to a wall
Installation hole
Mount on a wall, etc.

ANTENNA INSTALLATION

• FM ANTENNA

The supplied T-type indoor FM antenna (300 ohms) can be used inside wooden houses for receiving local FM stations and other strong FM signals. Stretch out the ends of the antenna and mount the antenna on the wall or ceiling where optimum reception is achieved. FM T-type antennas may not consistently ensure stable reception, due to environment changes. In such cases, the FM T-type antenna should only be used temporarily until an outdoor FM antenna has been installed.

When connecting an outdoor FM antenna, the use of 75 ohm coaxial cable (3C-2V, 5C-2V) is strongly recommended. Using a 300-ohm feeder cable will cause noise and you will not be able to achieve the high sound quality the built-in tuner is capable of delivering.

• AM ANTENNA

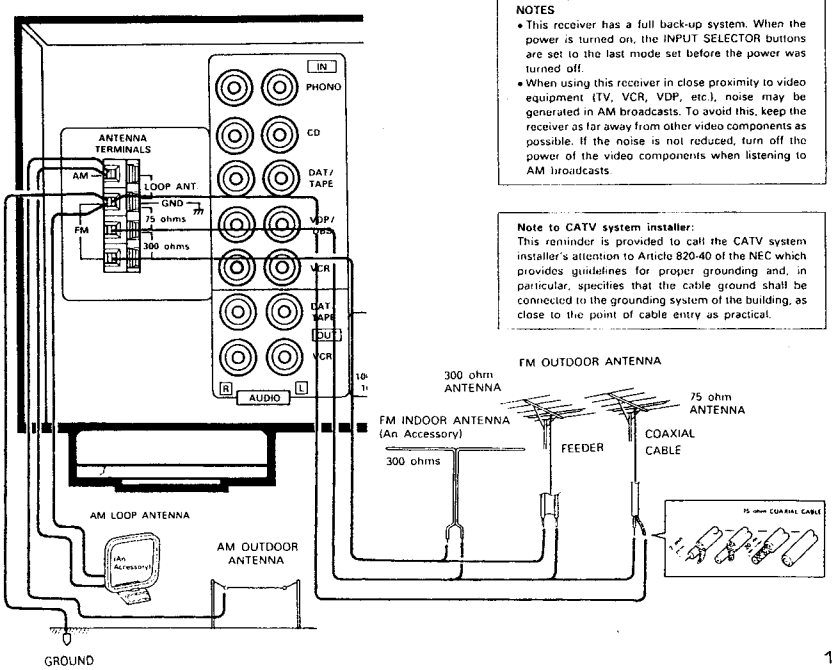
Assemble the included AM loop antenna as shown in the diagram, then place it in a position where reception is good. In some cases reception is better if the polarities are inverted. AM broadcasts will not be received well if the loop antenna is not connected or if it is connected but near a metal part.

Attach the loop antenna even when using an outdoor AM antenna.

Adjust the loop antenna to obtain optimum reception. Where broadcast stations are distant and only weak signals are received, or where signals are blocked, it is best to install an outdoor AM antenna.

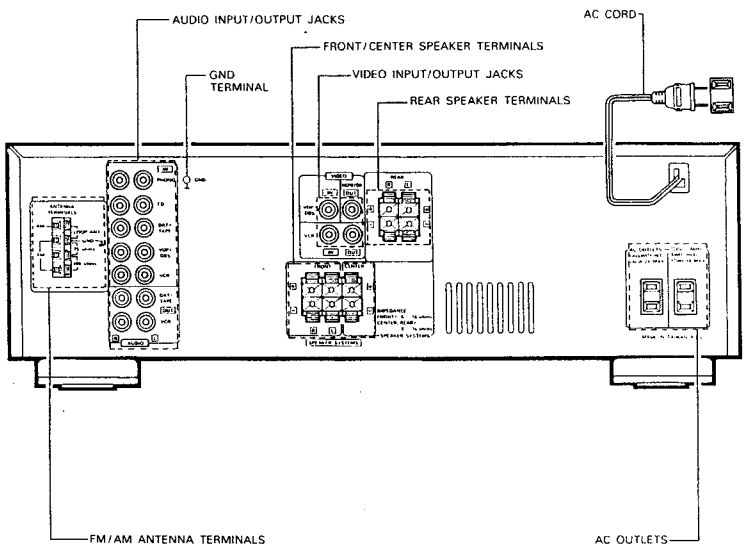
NOTES

- This receiver has a full back-up system. When the power is turned on, the INPUT SELECTOR buttons are set to the last mode set before the power was turned off.
- When using this receiver in close proximity to video equipment (TV, VCR, VDP, etc.), noise may be generated in AM broadcasts. To avoid this, keep the receiver as far away from other video components as possible. If the noise is not reduced, turn off the power of the video components when listening to AM broadcasts.



Note to CATV system installer:
This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

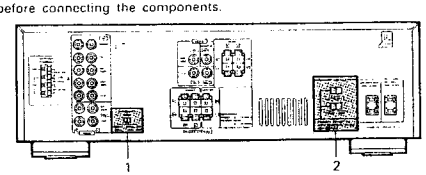
4 NAMES OF PARTS – 2 (Rear Panel)



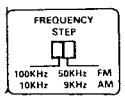
- Always turn off the power of the various components when making connections. Also refer to the operating instructions for the other components.
- Do not plug in the power cord until all connections are completed.

■ MULTI-VOLTAGE MODEL ONLY

Make the following settings before connecting the components.



1. Setting the frequency step

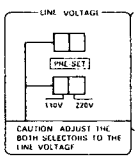


Set the FREQUENCY STEP switch as described below.

- In the U.S.A. and Canada – set the switch to 100 kHz / 10 kHz side.
  With this setting, the frequency varies in 100 kHz steps in the range of 87.5 to 108.0 MHz (FM) and in 10 kHz steps in 520 to 1710 kHz (AM).
- Elsewhere – set the switch to 50 kHz / 9 kHz side.
  With this setting, the frequency varies in 50 kHz steps in the range of 87.50 to 108.0 MHz (FM) and in 9 kHz steps in 522 to 1611 kHz (AM).

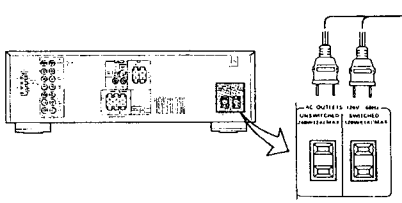
Only switch the frequency when the power cord is unplugged.
Plug in the power cord securely after switching the frequency.

2. Setting the line voltage



- The customer can set the VOLTAGE SELECTORS on the back panel for appropriate line voltage by using a screwdriver.
- Do not use excessive force in setting the VOLTAGE SELECTOR KNOB – you may damage it.
- If the VOLTAGE SELECTOR KNOB does not turn smoothly, contact your store of purchase.
- Be sure to set both voltage selectors to same position.

■ AC OUTLETS



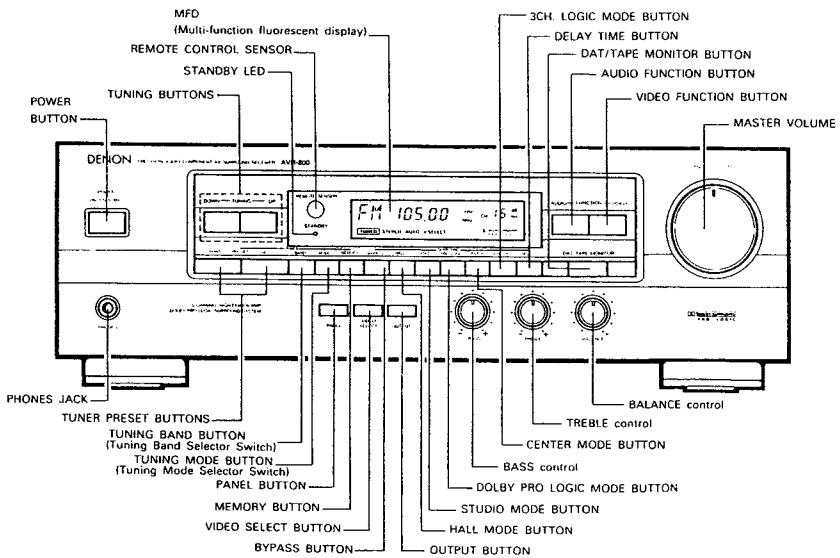
NOTE:
Only use the AC outlets for audio equipment. Never use them for hair driers, TVs or other electrical appliances.

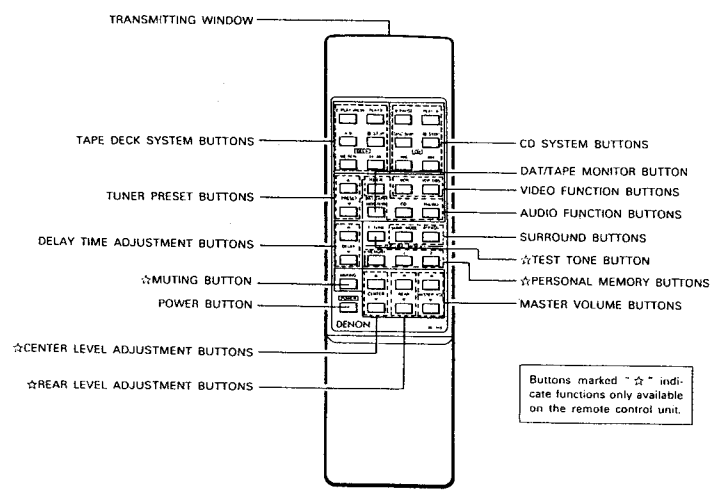
Connecting the AC Outlets

AC Outlets

- SWITCHED (total capacity – 120W (1A))
  The power to this outlet is turned on and off in conjunction with the POWER switch on the AVR-800, and when the power is switched between on and standby from the remote control unit. No power is supplied from these outlets when the AVR-800's power is at standby. Never connect equipment whose total capacity is above 120W (1A).
- UNSWITCHED (total capacity – 240W (2A))
  Power is supplied from this outlet constantly, regardless of whether or not the AVR-800's power is on. Never connect equipment whose total capacity is above 240W (2A).

2 NAMES OF PARTS – 1
(Front Panel and Remote Control Unit)



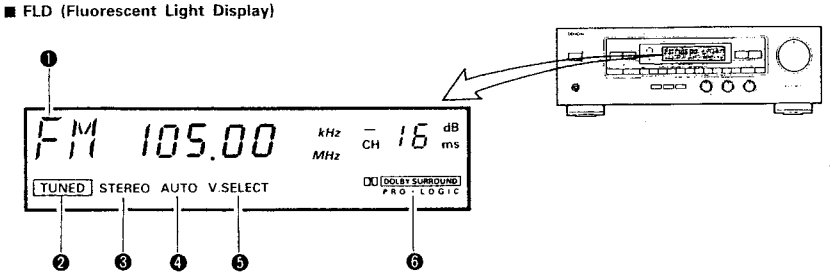


Buttons marked "☆" indicate functions only available on the remote control unit.

3 MULTI FUNCTION DISPLAY (MFD)

The MFD indicates the operating modes when operations are performed and when PANEL button is pressed.

■ FLD (Fluorescent Light Display)



❶ MULTI FUNCTION DISPLAY
Normally the reception frequency is displayed when the function is set to tuner, and the surround mode is displayed when the function is set to other positions. The display also indicates various other information according to the buttons pressed.

❷ TUNED (TUNED indicator)
This indicator lights when broadcast signals are received.

❸ STEREO (Stereo Indicator)
The STEREO indicator will automatically light up when a stereo broadcast is received.

❹ AUTO TUNING (AUTO TUNING Indicator)
This indicator lights when the auto tuning mode is selected by pressing the TUNING MODE button.

❺ V. SELECT (VIDEO SELECT Indicator)
This indicator lights when the video monitor output is fixed in the video select mode.

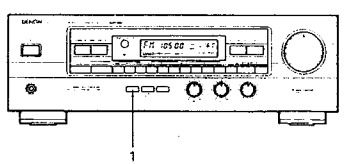
❻ DOLBY SURROUND Indicator
This indicator lights when DOLBY PRO LOGIC, 3CH. LOGIC are selected.

■ To check the settings of the different modes

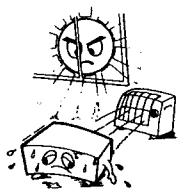
1. Press the PANEL button. Main unit	Either hold the PANEL button in or press it repeatedly to display the settings for the different modes.

■ FLD OFF

Turning the FLD off.

1. Press and hold in the PANEL button. (The FLD display changes continuously and finally turns off. Now when a button is pressed, the related display appears for a few seconds then turns off automatically.)	 1
2. Turning the FLD back on. Press the PANEL button once again.	

NOTE ON USE

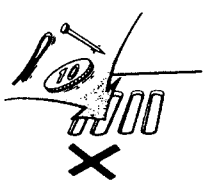


Be careful of high temperatures

- Do not place the set in a location where it will be exposed to direct sunlight or near a heating appliance.

Caution on rack/cabinet installation

- Avoid installing the set in a closed-type rack.
- When installing in a rack or cabinet, provide a sufficiently large ventilation opening to promote heat radiation.



Do not allow foreign matter into the equipment

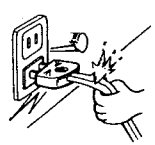
- Be especially careful of needles, hair pins, and coins getting into the set.

Caution on humidity, water, and dust

- Do not place the set in a location where there is high humidity or a lot of dust.
  Flower vases or other items containing water should not be placed on top of the set.

Care of the case

- Avoid the use of pesticides near the set as well as wiping the case with benzine, thinner or other solvents since they may cause a change in quality or color. Use a soft cloth when wiping away dirt and follow the instructions carefully when using chemically treated cloths.

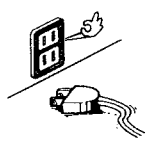


Care with the power cord

- When removing the plug from the receptacle, do not pull the power cord; be sure to hold the plug when removing it.

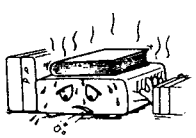
Do not open the case

- Opening the top cover or the bottom plate of the case and inserting your hand is dangerous. Do not open the case.
  If some trouble arises with the performance of the set, remove the power plug soon and contact the store where the set was purchased or a nearby dealer.



During your absence

- When not using the set for an extended period such as when taking a trip, be sure to disconnect the plug from the receptacle.



For sets with ventilation holes

Do not block the ventilation holes of the set

- Blocking of the ventilation holes will lead to damage of the set.
- The ventilation holes are very important for heat radiation from within the set. Care must be taken since placing an object against the holes will result in an extreme rise of temperature within the set.

■ We greatly appreciate your purchase of the AVR-800.
■ To be sure you take maximum advantage of all the features the AVR-800 has to offer, read these instructions carefully and use the set properly. Be sure to keep this manual for future reference should any questions or problems arise.

• ACCESSORIES

Check that the following parts are included in addition to the main unit:

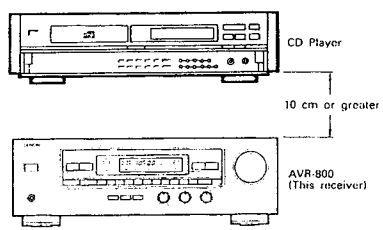
① Operating instructions 1
② Warranty (for North American model only) 1
③ Remote control unit (RC-169) 1
④ R6P/AA batteries 2
⑤ AM loop antenna 1
⑥ FM indoor antenna 1

• INSTALLATION PRECAUTIONS

Using this receiver or other electronic equipment containing microprocessors simultaneously with a tuner or TV may result in noise in the sound or picture.
If this should happen, take the following steps:

- Install the receiver as far as possible from the tuner or TV set.
- Keep the antenna lines of the tuner or TV as far as possible from the receiver's power cord and connection cables.
- This problem is especially frequent when using indoor antennas or 300 ohm feeder lines. We recommend using outdoor antennas and 75 ohm coaxial cables.

A note on stacking



For cooling purposes, do not place another AV component directly on top of the receiver. Be sure to leave a space of at least 10 cm.

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- Safety Instructions 3
- Note on Use 4

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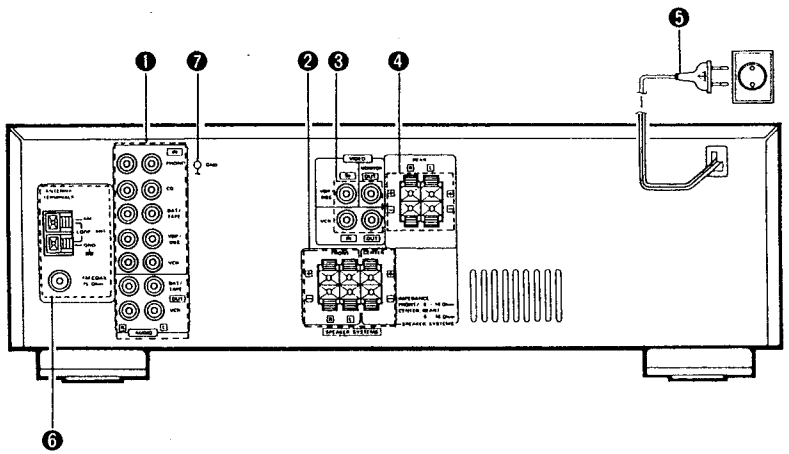
DENON SERVICE NETWORK ..... Bottom

(Rear Panel) **(Panel trasero)**
(Rückseite) **(Achterpaneel)**
(Panneau arrière) **(Bakpanelen)**
(Pannello posteriore)



FOR ENGLISH READERS
❶ AUDIO INPUT/OUTPUT JACKS
❷ FRONT/CENTER SPEAKER TERMINALS
❸ VIDEO INPUT/OUTPUT JACKS
❹ REAR SPEAKER TERMINALS
❺ AC CORD
❻ FM/AM ANTENNA TERMINALS
❼ GND (Grounding terminal)

FÜR DEUTSCHE LESER
❶ Audio Eingangs-/Ausgangs-Buchsen (AUDIO INPUT/OUTPUT)
❷ Lautsprecheranschlüsse für Vorne und Mitte (FRONT/CENTER SPEAKER)
❸ Video Eingangs-/Ausgangs-Buchsen (VIDEO INPUT/OUTPUT)
❹ Anschlüsse für Hecklautsprecher (REAR SPEAKER)
❺ Netzkabel
❻ UKW/MW-Antennenanschlüsse (FM/AM ANTENNA)
❼ GND (Masseanschluß)

POUR LES LECTEURS FRANCAIS
❶ PRISES D'ENTREE/SORTIE AUDIO (AUDIO INPUT/OUTPUT)
❷ BORNES D'ENCEINTE AVANT/CENTRALE (FRONT/CENTER SPEAKER)
❸ PRISES D'ENTREE/SORTIE VIDEO (VIDEO INPUT/OUTPUT)
❹ BORNES D'ENCEINTE ARRIERE (REAR SPEAKER)
❺ CORDON SECTEUR
❻ BORNES D'ANTENNE FM/AM (FM/AM ANTENNA)
❼ GND (Borne de mise à la masse)

PER IL LETTORE ITALIANO
❶ PRESE DI INGRESSO/USCITA AUDIO
❷ TERMINALI DEGLI ALTOPARLANTI ANTERIORI/CENTRALI
❸ PRESE DI INGRESSO/USCITA VIDEO
❹ TERMINALI DEGLI ALTOPARLANTI POSTERIORI
❺ CAVO CA
❻ TERMINALI DELL'ANTENNA FM/AM
❼ GND (Terminale di massa)

PARA LECTORES DE ESPAÑOL
❶ CONECTORES DE ENTRADA/SALIDA DE AUDIO
❷ TERMINALES DE ALTAVOCES DELANTEROS/CENTRAL
❸ CONECTORES DE ENTRADA/SALIDA DE VIDEO
❹ TERMINALES DE ALTAVOCES TRASEROS
❺ CABLE DE ALIMENTACION DE CA
❻ TERMINALES DE ANTENA DE FM/AM
❼ GND (Terminal de conexión a tierra)

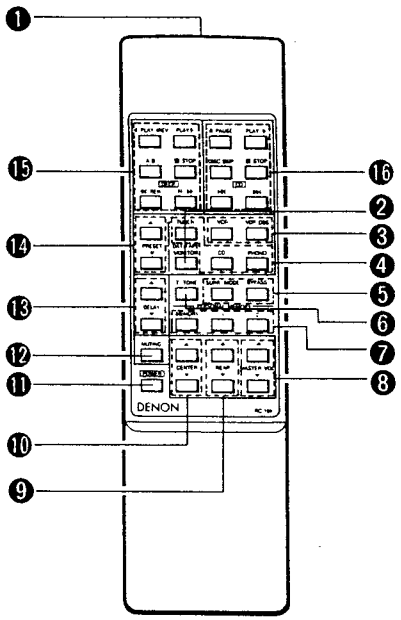
VOOR NEDERLANDSTALIGE LEZERS
❶ AUDIO-INVOER/-UITVOERAANSLUITINGEN
❷ AANSLUITPUNTEN VOORSTE/MIDDENLUIDSPREKERS
❸ VIDEO-INVOER/UITVOERAANSLUITINGEN
❹ AANSLUITPUNTEN ACHTERSTE LUIDSPREKERS
❺ NETKABEL
❻ AANSLUITPUNTEN FM/AM-ANTENNE
❼ GND (Aardingsaansluitpunt)

FÖR SVENSKA LÄSARE
❶ Audioingångar och -utgångar (AUDIO INPUT/OUTPUT)
❷ Anslutningar för framre/mitthögtalare (FRONT/CENTER SPEAKER)
❸ Videoingångar och -utgångar (VIDEO INPUT/OUTPUT)
❹ Anslutningar för bakre högtalare (REAR SPEAKER)
❺ Nätsladd
❻ Anslutningar för FM-/AM-antenn (FM/AM ANTENNA)
❼ GND (Jordpunkt)

- Always turn off the power of the various components when making connections. Also refer to the operating instructions for the other components.
- Do not plug in the power cord until all connections are completed.
- Schalten Sie beim Vornehmen von Anschlüssen immer den Strom zu den verschiedenen Komponenten aus. Beziehen Sie sich darüberhinaus auf die Bedienungsanleitungen für die anderen Komponenten.
- Schließen Sie das Netzkabel nicht an, bevor alle anderen Anschlüsse komplett ausgeführt worden sind.
- Mettre toujours les divers appareils hors circuit lors de la réalisation des connexions. Se reporter également aux modes d'emploi des autres appareils.
- Ne pas brancher le cordon d'alimentation avant d'avoir terminé toutes les connexions.
- Spegnete sempre la corrente dei vari componenti prima di fare i collegamenti. Inoltre, fate riferimento al manuale di ciascun componente.
- Non inserite il filo di alimentazione finchè tutti i collegamenti non saranno stati fatti.
- Antes de hacer las conexiones, desconecte la alimentación a los distintos componentes. Consulte también los manuales de instrucciones de los componentes en uso.
- No conecte el cable de alimentación hasta haber finalizado todas las conexiones.
- Schakel altijd de spanning van de verschillende komponenten uit wanneer u aansluitingen maakt. Raadpleeg ook de gebruiksaanwijzing van de andere komponenten.
- Steek het netsnoer pas in als alle aansluitingen tot stand zijn gebracht.
- Kom alltid ihåg att stänga av alla apparater innan du ändrar några anslutningar. Läs respektive bruksanvisningar för närmare upplysningar.
- Nätkabeln skall inte sättas i vägguttaget förrän alla andra anslutningar är klara.

(Remote Control Unit)
(Fernbedienungsgerät)
(Télécommande)
(Telecomando)

(Unidad de Control Remoto)
(Afstandsbediening)
(Fjärrkontroll)



FOR ENGLISH READERS
1. TRANSMITTING WINDOW
2. DAT/TAPE MONITOR BUTTON
3. VIDEO FUNCTION BUTTONS
4. AUDIO FUNCTION BUTTONS
5. SURROUND BUTTONS
6. ☆TEST TONE BUTTON
7. ☆PERSONAL MEMORY BUTTONS
8. MASTER VOLUME BUTTONS
9. ☆REAR LEVEL ADJUSTMENT BUTTONS
10. ☆CENTER LEVEL ADJUSTMENT BUTTONS
11. POWER BUTTON
12. ☆MUTING BUTTON
13. DELAY TIME ADJUSTMENT BUTTONS
14. TUNER PRESET BUTTONS
15. TAPE DECK SYSTEM BUTTONS
16. CD SYSTEM BUTTONS

Buttons marked " ☆ " indicate functions only available on the remote control unit.

FÜR DEUTSCHE LESER
1. Übertragungsfenster (TRANSMITTING WINDOW)
2. Datum/Band Überwachungstaste (DAT/TAPE MONITOR)
3. Video-Funktionstasten (VIDEO FUNCTION)
4. Audio-Funktionstasten (AUDIO FUNCTION)
5. Klangumgebungs-Tasten (SURROUND)
6. ☆Testton-Taste (TEST TONE)
7. ☆Persönliche Speichertasten (PERSONAL MEMORY)
8. Hauptlautstärke-Tasten (MASTER VOLUME)
9. ☆Einstellungstasten für hintere Stufe (REAR LEVEL ADJUSTMENT)
10. ☆Einstellungstasten für Mittelstufe (CENTER LEVEL ADJUSTMENT)
11. Netztaste (POWER)
12. ☆Stummschaltungs-Taste (MUTING)
13. Einstellungstasten für Zeitverzögerung (DELAY TIME ADJUSTMENT)
14. Tuner-Voreinstellungs-Tasten (TUNER PRESET)
15. Systemtasten für Tape Deck (TAPE DECK SYSTEM)
16. CD-Systemtasten (CD SYSTEM)

Die mit " ☆ " markierten Tasten zeigen Funktionen an, die nur mit Hilfe des Fernbedienungsgerätes aktiviert werden können.

POUR LES LECTEURS FRANCAIS
1. FENETRE D'EMISSION
2. TOUCHE DAT/CONTROLE DE BANDE (DAT/MONITOR)
3. TOUCHES DE FONCTION VIDEO (VIDEO FUNCTION)
4. TOUCHES DE FONCTION AUDIO (AUDIO FUNCTION)
5. TOUCHES D'AMBIANCE (SURROUND)
6. ☆TOUCHE DE TONALITE TEST (TONE TEST)
7. ☆TOUCHES DE MEMOIRE PERSONNALISEE (PERSONAL MEMORY)
8. TOUCHES DE VOLUME GLOBAL (MASTER VOLUME)
9. ☆TOUCHES DE REGLAGE DE NIVEAU ARRIERE (REAR LEVEL)
10. ☆TOUCHES DE REGLAGE DE NIVEAU CENTRAL (CENTER LEVEL)
11. TOUCHE D'ALIMENTATION (POWER)
12. ☆TOUCHE DE SOURDINE (MUTING)
13. TOUCHE DE REGLAGE DE RETARD (DELAY TIME ADJUSTMENT)
14. TOUCHES PREREGLAGE DE TUNER
15. TOUCHES DE SYSTEME DE PLATINE CASSETTE (TAPE DECK SYSTEM)
16. TOUCHES DE SYSTEME CD (CD SYSTEM)

Les touches marquées " ☆ " indiquent des fonctions disponibles seulement sur la télécommande.

PER IL LETTORE ITALIANO
1. FINESTRELLA DI TRASMISSIONE
2. TASTO DELLA PIASTRA DAT/MONITORAGGIO DEL NASTRO
3. TASTI DELLA FUNZIONE VIDEO
4. TASTI DELLA FUNZIONE AUDIO
5. TASTI SURROUND
6. ☆TASTO DEL TONO DI PROVA
7. ☆TASTI DELLA MEMORIA PERSONALE
8. TASTI DEL VOLUME PRINCIPALE
9. ☆TASTI DI REGOLAZIONE DEL LIVELLO POSTERIORE
10. ☆TASTI DI REGOLAZIONE DEL LIVELLO CENTRALE
11. TASTO DI ACCENSIONE
12. ☆TASTO DI SILENZIAMENTO
13. TASTI DI REGOLAZIONE DELLA DURATA DEL RITARDO
14. TASTI DI PRESELEZIONE DEL SINTONIZZATORE
15. TASTI DELLA PIASTRA A CASSETTE
16. TASTI DEL SISTEMA CD

I tasti che recano il marchio " ☆ " indicano funzioni che sono disponibili solo usando il telecomando.

PARA LECTORES DE ESPAÑOL
1. VENTANILLA TRANSMISORA
2. BOTON DAT/TAPE MONITOR
3. BOTONES SELECTORES DE ENTRADA DE VIDEO
4. BOTONES SELECTORES DE ENTRADA DE AUDIO
5. BOTONES DE SONIDO ENVOLVENTE
6. ☆BOTON DE TONO DE PRUEBA (TEST TONE)
7. ☆BOTONES DE MEMORIA PERSONAL (PERSONAL MEMORY)
8. BOTONES DE VOLUMEN PRINCIPAL
9. ☆BOTONES DE AJUSTE DE NIVEL TRASERO (REAR LEVEL)
10. ☆BOTONES DE AJUSTE DE NIVEL CENTRAL (CENTER LEVEL)
11. INTERRUPTOR DE ALIMENTACION
12. ☆BOTON DE SILENCIAMIENTO (MUTING)
13. BOTONES DE AJUSTE DE TIEMPO DE RETARDO
14. BOTONES DE PRESINTONIZACION
15. BOTONES DE MAGNETOFONO DE CASSETTES
16. BOTONES DE REPRODUCTOR CD

Los botones marcados " ☆ " indican funciones sólo disponibles en la unidad de control remoto.

VOOR NEDERLANDSTALIGE LEZERS
1. ZENDVENSTERTJE
2. DAT/TAPE-MEELUISTERTOETS (DAT/TAPE MONITOR)
3. VIDEOFUNKTIETOETSEN (VIDEO FUNCTION)
4. AUDIOFUNKTIETOETSEN (AUDIO FUNCTION)
5. SURROUND-TOETSEN
6. ☆TESTTOONTOETS (TEST TONE)
7. ☆PERSOONLIJK GEHEUGENTOETSEN (PERSONAL MEMORY)
8. HOOFDVOLUMETOETSEN (MASTER VOLUME)
9. ☆ACHTERNIVEAU-INSTELTOETSEN (REAR LEVEL ADJUSTMENT)
10. ☆MIDDENNIVEAU-INSTELTOETSEN (CENTER LEVEL ADJUSTMENT)
11. SPANNINGSTOETS (POWER)
12. ☆DEMPINGSTOETS (MUTING)
13. VERTRAGINGSTIJD-INSTELTOETSEN (DELAY TIME ADJUSTMENT)
14. TUNER-VOORKEUZETOETSEN (TUNER PRESET)
15. TAPEDECK-SYSTEEMTOETSEN (TAPE DECK SYSTEM)
16. CD-SYSTEEMTOETSEN (CD SYSTEM)

De met " ☆ " gemerkte toetsen duiden funkties aan die enkel met de afstandsbediening kunnen worden gebruikt.

FÖR SVENSKA LÄSARE
1. Sändarfönster
2. DAT-/däckomkopplare (DAT/TAPE MONITOR)
3. Videotangenter (VIDEO FUNCTION)
4. Audiotangenter (AUDIO FUNCTION)
5. SURROUND-tangenter
6. ☆Testtontangent (TEST TONE)
7. ☆Tangenter för användarminne (PERSONAL MEMORY)
8. Ljudstyrketangenter (MASTER VOLUME)
9. ☆Tangenter för justering av den bakre nivån (REAR LEVEL ADJUSTMENT)
10. ☆Tangenter för justering av mittkanalnivån (CENTER LEVEL ADJUSTMENT)
11. Strömbrytare (POWER)
12. ☆Dämptangent (MUTING)
13. Tangenter för justering av tidsfördröjningen (DELAY TIME ADJUSTMENT)
14. Snabbvalstangenter (TUNER PRESET)
15. Systemtangenter för kassettdäcket (TAPE DECK SYSTEM)
16. CD-tangenter (CD SYSTEM)

Tangenter märkta " ☆ " motsvarar funktioner som bara kan utnyttjas via fjärrkontrollen.

■ We greatly appreciate your purchase of the AVR-800.
■ To be sure you take maximum advantage of all the features the AVR-800 has to offer, read these instructions carefully and use the set properly. Be sure to keep this manual for future reference should any questions or problems arise.

• ACCESSORIES

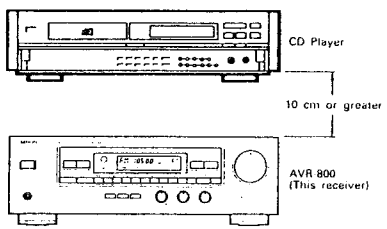
Check that the following parts are included in addition to the main unit:

① Operating instructions 1
② Warranty (for North American model only) 1
③ Remote control unit (RC-169) 1
④ R6P/AA batteries 2
⑤ AM loop antenna 1
⑥ FM indoor antenna 1

• INSTALLATION PRECAUTIONS

Using this receiver or other electronic equipment containing microprocessors simultaneously with a tuner or TV may result in noise in the sound or picture.
If this should happen, take the following steps:
- Install the receiver as far as possible from the tuner or TV set.
- Keep the antenna lines of the tuner or TV as far as possible from the receiver's power cord and connection cables.
- This problem is especially frequent when using indoor antennas or 300 ohm feeder lines. We recommend using outdoor antennas and 75 ohm coaxial cables.

A note on stacking



For cooling purposes, do not place another AV component directly on top of the receiver. Be sure to leave a space of at least 10 cm.

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•Rear Panel 5
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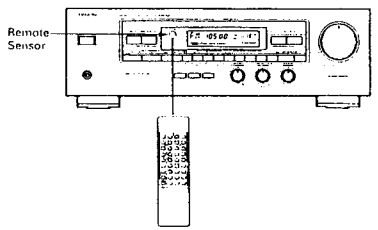
DENON SERVICE NETWORK 76, 77

[3] REMOTE CONTROL UNIT

Following the procedure outlined below, insert the batteries before using the remote control unit.

■ Range of operation of the remote control unit

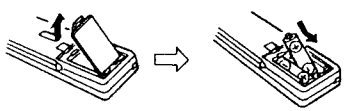


Point the remote control unit at the remote control sensor as shown on the diagram at the left.

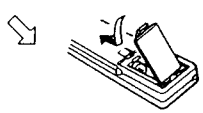
NOTES:
- The remote control unit can be used from a straight distance of approximately 7 meters, but this distance will shorten or operation will become difficult if there are obstacles between the remote control unit and the remote control sensor, if the remote control sensor is exposed to direct sunlight or other strong light, or if operated from an angle.
- Neon signs or other devices emitting pulse-type noise nearby may result in malfunction, so keep the set as far away from such devices as possible.

■ Inserting the batteries

1. Open the bottom cover of the remote control unit and remove the battery cover.



2. Insert the two R6P/AA batteries, matching the ⊕ and ⊖ marks on the batteries with those in the case. Close the bottom cover until it clicks shut.

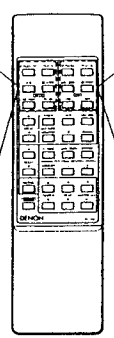


NOTES
- Use only R6P, AA, UM-3 batteries for replacement.
- Be sure the polarities are correct. (See the illustration inside the battery compartment.)
- Remove the batteries if the remote control transmitter will not be used for an extended period of time.
- If batteries leak, dispose of them immediately. Avoid touching the leaked material or letting it come in contact with clothing, etc. Clean the battery compartment thoroughly before installing new batteries.
- When replacing the batteries, always replace both batteries with new ones.

■ System codes

The system codes for Denon tape decks and CD players are set in this remote control unit.

Tape deck system buttons
With these buttons, a Denon remote controllable tape deck can be controlled directly.
For details, refer to the tape deck's operating instructions. Note that operation may not be possible for some models.
▶ : Forward play
◀ : Reverse play
■ : Stop
◀◀ : Rewind
▶▶ : Fast-forward
A/B : Switching between decks A and B for double decks



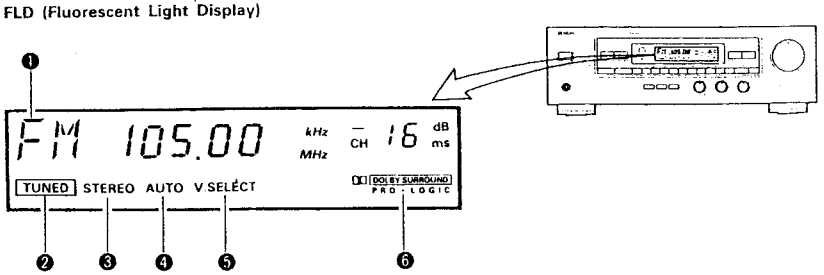
CD system buttons
With these buttons, a Denon remote controllable CD player can be controlled directly.
For details, refer to the CD player's operating instructions. Note that operation may not be possible for some models.
▶ : Play
⏸ : Pause
■ : Stop
⏮ and ⏭ : Auto search (reverse and forward)
DISC SKIP : CD changer, disc skip

➡ Continued

4 MULTI FUNCTION DISPLAY (MFD)

The MFD indicates the operating modes when operations are performed and when PANEL button is pressed.

■ FLD (Fluorescent Light Display)



❶ MULTI FUNCTION DISPLAY
Normally the reception frequency is displayed when the function is set to tuner, and the surround mode is displayed when the function is set to other positions. The display also indicates various other information according to the buttons pressed.

❷ TUNED (TUNED indicator)
This indicator lights when broadcast signals are received.

❸ STEREO (Stereo Indicator)
The STEREO indicator will automatically light up when a stereo broadcast is received.

❹ AUTO TUNING (AUTO TUNING Indicator)
This indicator lights when the auto tuning mode is selected by pressing the TUNING MODE button.

❺ V. SELECT (VIDEO SELECT Indicator)
This indicator lights when the video monitor output is fixed in the video select mode.

❻ DOLBY SURROUND Indicator
This indicator lights when DOLBY PRO LOGIC, 3CH. LOGIC are selected.

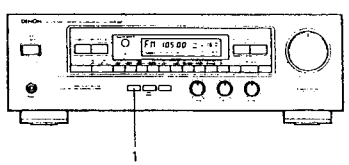
■ To check the settings of the different modes

1. Press the PANEL button. Main unit	Either hold the PANEL button in or press it repeatedly to display the settings for the different modes.

■ FLD OFF

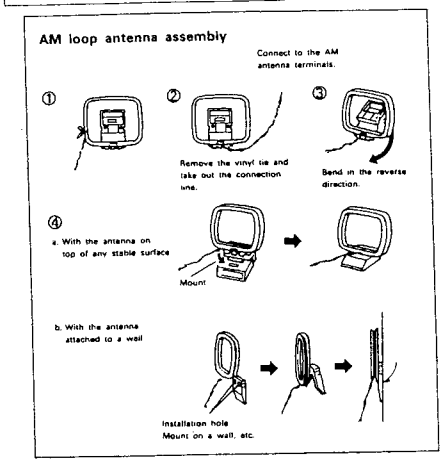
Turning the FLD off.

1. Press and hold in the PANEL button. (The FLD display changes continuously and finally turns off. Now when a button is pressed, the related display appears for a few seconds then turns off automatically.)	
2. Turning the FLD back on. Press the PANEL button once again.	



5 CONNECTIONS

Connecting the antenna terminals


AM loop antenna assembly
Connect to the AM antenna terminals.
①
②
③
Remove the vinyl tie and take out the connection line.
Bend in the reverse direction.
④
a. With the antenna on top of any stable surface
Mount
b. With the antenna attached to a wall
Installation hole
Mount on a wall, etc.

ANTENNA INSTALLATION

- **FM ANTENNA**

The supplied T-type indoor FM antenna (300 ohms) can be used inside wooden houses for receiving local FM stations and other strong FM signals. Stretch out the ends of the antenna and mount the antenna on the wall or ceiling where optimum reception is achieved. FM T-type antennas may not consistently ensure stable reception, due to environment changes. In such cases, the FM T-type antenna should only be used temporarily until an outdoor FM antenna has been installed.

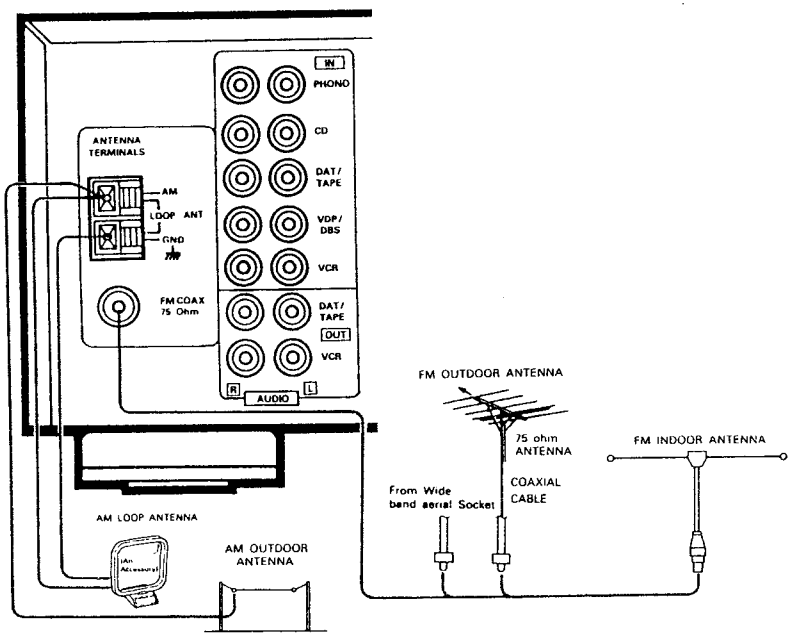
When connecting an outdoor FM antenna, the use of 75 ohm coaxial cable (3C-2V, 5C-2V) is strongly recommended. Using a 300-ohm feeder cable will cause noise and you will not be able to achieve the high sound quality the built in tuner is capable of delivering.

- **AM ANTENNA**

Assemble the included AM loop antenna as shown in the diagram, then place it in a position where reception is good. In some cases reception is better if the polarities are inverted. AM broadcasts will not be received well if the loop antenna is not connected or if it is connected but near a metal part.

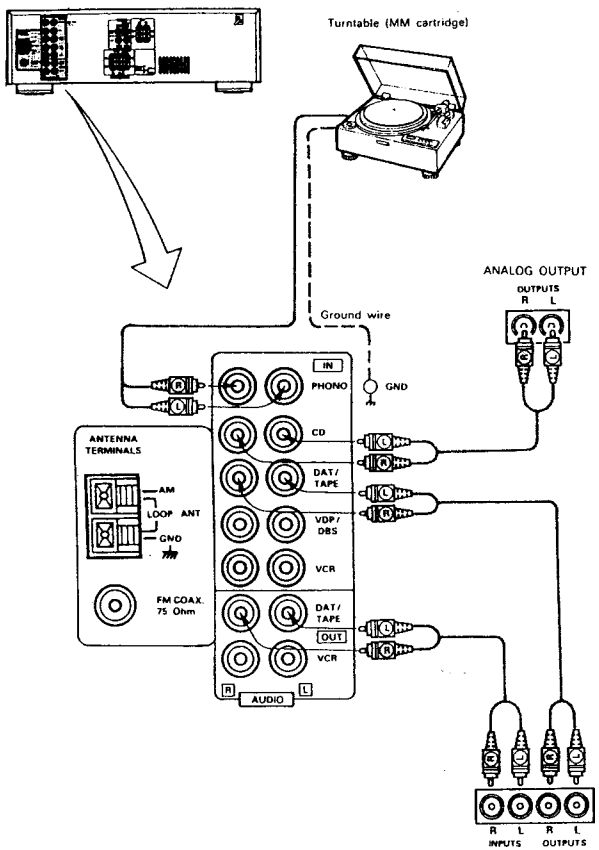
Attach the loop antenna even when using an outdoor AM antenna.

Adjust the loop antenna to obtain optimum reception. Where broadcast stations are distant and only weak signals are received, or where signals are blocked, it is best to install an outdoor AM antenna.



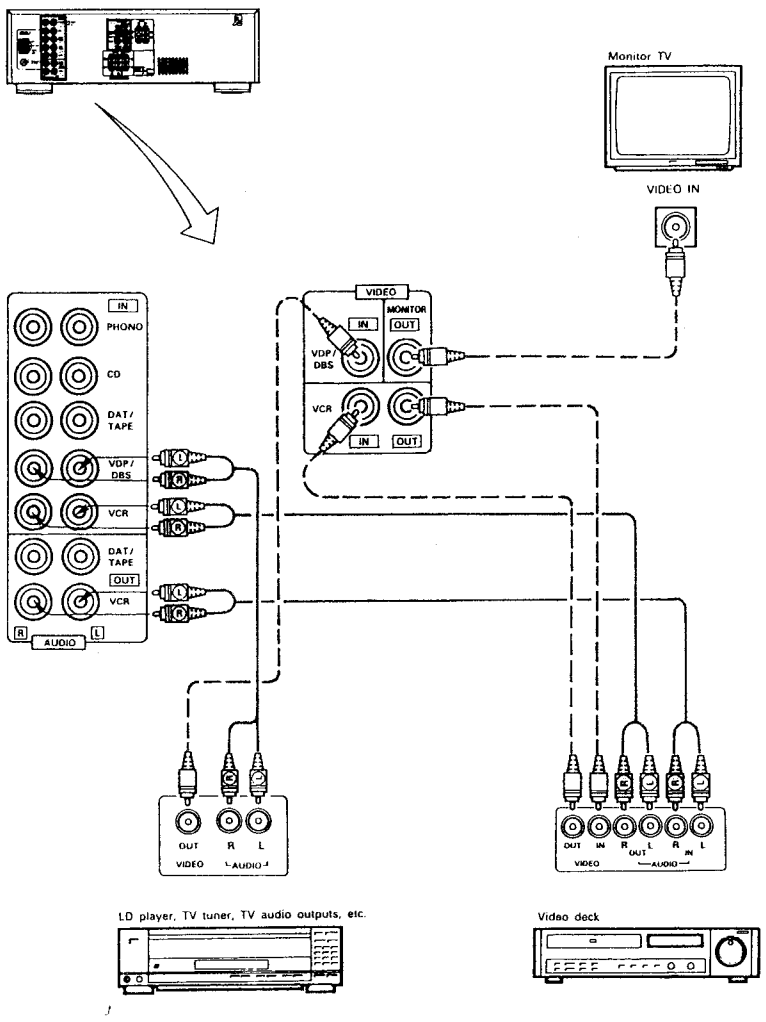
Audio Section

- Do not plug in the power cord until all connections have been completed.
- Be sure to connect the left and right channels properly (left with left, right with right).
- Insert the plugs securely. Incomplete connections will result in the generation of noise.
- Note that binding pin plug cords together with power cords or placing them near a power transformer will result in the introduction of hum or other noise.
- If hum or other noise is produced when the ground wire is connected, disconnect it.
- Noise or humming may be generated if a connected component is used independently without turning the power of the AVR-800 on. If this happens, turn on the power of the AVR-800.

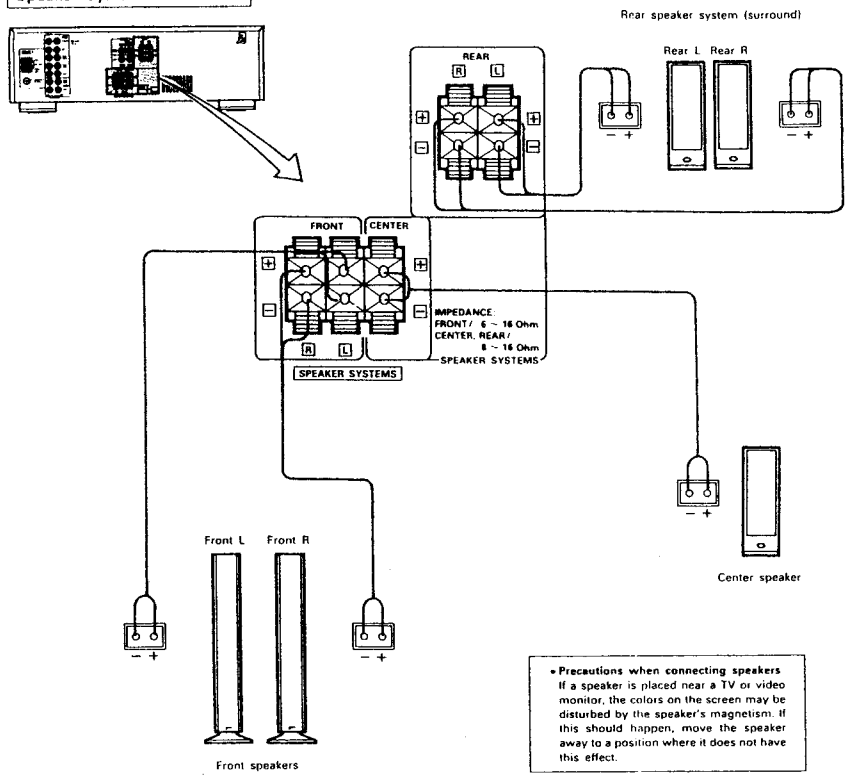


NOTE:
The receiver cannot be used with MC cartridges directly. Use a separate head amplifier or step-up transformer.

Video Section

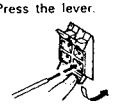
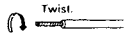
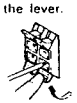


Speaker System Connections



• Precautions when connecting speakers
If a speaker is placed near a TV or video monitor, the colors on the screen may be disturbed by the speaker's magnetism. If this should happen, move the speaker away to a position where it does not have this effect.

- This receiver can accommodate connections of a total of five speakers including one set of front speakers, one set of rear speakers, and one center speaker.
- Connect the speaker terminals with the speakers making sure that like polarities are matched (⊕ with ⊕, ⊖ with ⊖). Mismatching of polarities will result in weak central sound, unclear orientation of the various instruments, and the sense of direction of the stereo being impaired.
- When making connections, take care that none of the individual conductors of the speaker cord come in contact with adjacent terminals, with other speaker cord conductors, or with the rear panel.
- **Speaker Impedance**
  - Speakers with an impedance of 6 to 16 ohms can be connected for use as front speakers 8 to 16 ohms can be connected for use as center and rear speakers.
  - Using speakers with an impedance other than the specified one may result in damage. Be sure to use speakers of the specified impedance.

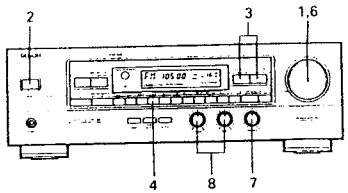
Preparing the cord	Connecting the center and rear speaker terminals.
1. Peel off the sheath. 	1. Press the lever. 
2. Twist the wires. 	2. Insert the cord and release the lever. 

➡ Continued

6 PLAYBACK

■ Preparations for Playback

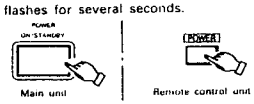
Check the connections
- Check that all connections are proper, referring to the connections diagrams (pages 7 to 9).



■ Playing the program source (normal stereo playback)

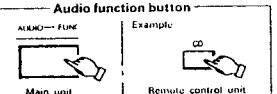
1. Set the MASTER VOLUME control to the minimum.

2. Press the POWER button to turn the power on.
The muting mode is set for several seconds, after which the STANDBY LED flashes for several seconds.



3. Select the source to be played.

Audio function button

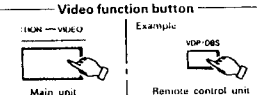


PHONO → CD → TUNER

The source switches as shown above MFD.

PHONO, CD or TUNER can be selected directly.

Video function button

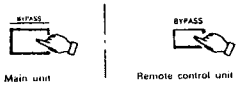


VDP/DBS → VCR

The source switches as shown above MFD.

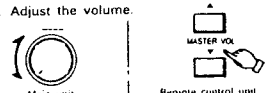
VDP/DBS and VCR can be selected directly.

4. Press the BYPASS button.



5. Start playback the source.
For instructions, refer to the source's operating instructions.

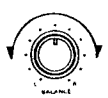
6. Adjust the volume.



Turn the control clockwise to increase the volume, counterclockwise to decrease it.

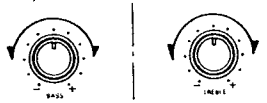
Press the ▲ button to increase the volume, the ▼ button to decrease it.

7. Adjust the left/right balance.



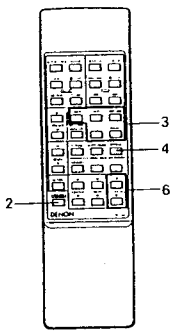
Turn the control counterclockwise to reduce the volume of the right channel, clockwise to reduce the volume of the left channel.

8. Adjust the tone.



Turn the control clockwise to increase the bass, counterclockwise to decrease it.

Turn the control clockwise to increase the treble, counterclockwise to decrease it.



NOTE:
The sound may be interrupted if switches are operated during playback. This is because the muting circuit is activated to prevent switching noise.

■ Simulcast playback (playing different video and audio sources simultaneously)

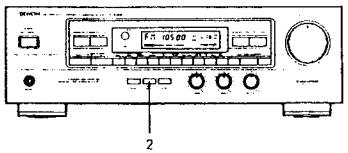
1. Follow steps 1 to 3 under "Playing the program source".
2. Press the VIDEO SELECT button until the desired video source is displayed on the MFD.

Main unit

VDP/DBS ↓ VCR

The source switches as shown above.

3. Follow steps 4 to 8 under "Playing the program source".



Cancelling simulcast playback

- Press the VIDEO SELECT button again.
- Press the video function button on the main unit or remote control unit.

■ Using the muting function

Use this to turn off the audio output temporarily.

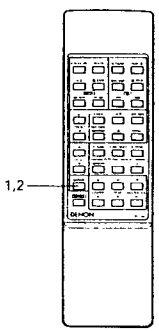
1. Press the MUTING button.

This function can only be set from the remote control unit.

Remote control unit

The STANDBY LED flashes when the muting function is set.

2. Press the MUTING button again.
The muting function is cancelled.



7 RECORDING

■ Recording the program source

(recording the source currently being monitored)

1. Follow steps 1 to 3 under "Playing the program source".
2. Start recording on the tape or video deck.
For instructions, refer to the component's operating instructions.

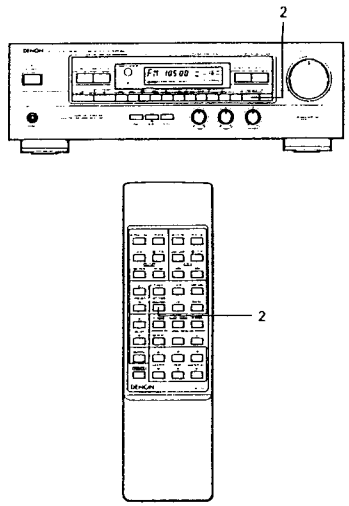
NOTE:

The recording source switches if the audio function, video function, personal memory "1" or "2" or tuner preset buttons are pressed during recording. Do not press these buttons during recording.

Simultaneous recording

The signals of the source selected with the function selector button are output simultaneously to the DAT/TAPE and VCR REC OUT jacks. If a total of two tape and/or video decks are connected and set to the recording mode, the same source can be recorded simultaneously on both decks.
In addition, if the TAPE MONITOR (DAT/TAPE) button is pressed, the audio signals from the tape deck are output to the VCR AUDIO REC OUT jacks.

8 TAPE MONITOR FUNCTION



■ When playing a DAT or tape deck

Use this function to switch between the DAT or tape deck and the input (source) selected with the audio or video function buttons.

1. Follow steps 1 and 2 under "Playing the program source".
2. Select the deck to be played.

Main unit — Remote control unit

DAT/TAPE ↑ SOURCE

The source switches as shown at the left.

3. Follow steps 5 to 8 under "Playing the program source".

■ Monitoring the recording on a three-headed tape deck

The sound actually being recorded can be monitored during recording when a three-headed tape deck is used.

1. Select the deck to be monitored.

Main unit — Remote control unit

DAT/TAPE ↑ SOURCE

The source switches as shown at the left.

2. Follow steps 1 to 3 under "Playing the program source".
3. Start recording on the tape deck. For instructions, refer to the component's operating instructions.
4. Press the three-headed tape deck's source/tape button to monitor the recording.

NOTE:

- Also refer to the three-headed tape deck's operating instructions.

9 USING HEADPHONES

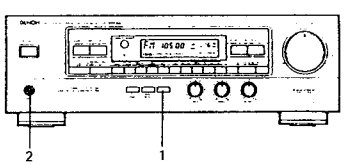
The sound from the speakers can be turned off using the OUTPUT button to listen to the sound over the headphones only, for example at night.

1. Press the OUTPUT button.

Main unit

"H/P ONLY" appears on the MFD.

2. Insert the headphones' plug into the headphones' jack.



Cancelling

Either press the OUTPUT button again or press the POWER button to turn off the power.

10 LISTENING TO THE RADIO

■ Tuning

1. Set the input function to "TUNER".

2. Select the reception band.

FM
AM

There is a change as mentioned at the left, and indication ① inside the MFD changes.

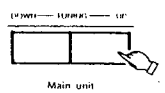
3. Select the tuning mode.

AUTO
MANUAL

The mode switches as shown at the left. When the auto mode is set, "AUTO" lights on the MFD ④.

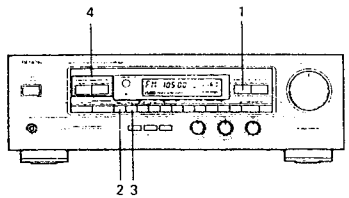
Set the auto mode for automatic tuning, the manual mode for manual tuning.

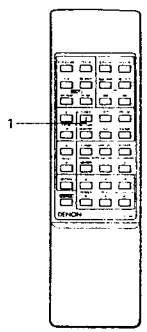
4. Tune in the station.



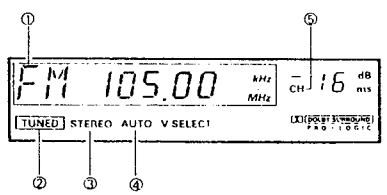
In the manual tuning mode:
Press the UP button once to increase the frequency by one step, the DOWN button once to decrease the frequency by one step.
The frequency changes continuously when the buttons are held in.
The "TUNED" indicator ② lights on the MFD when a station is tuned in.

In the auto tuning mode:
When the UP or DOWN button is pressed, automatic searching begins, and searching stops when a station is tuned in.





MFD display



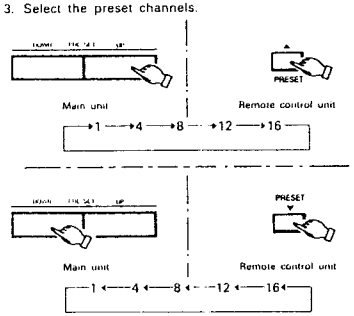
NOTES:
- When in the auto tuning mode on the FM band, the "STEREO" indicator ③ lights on the MFD when a stereo broadcast is tuned in. At open frequencies, the noise is muted and the "TUNED" ② and "STEREO" ③ indicators turn off.
- When the manual tuning mode is set, FM stereo broadcasts are received in monaural and the "STEREO" indicator ③ turns off.

■ Storing stations at the preset buttons

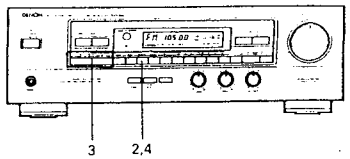
1. Follow steps 1 to 4 under "Tuning" to tune in a station.
2. Press the MEMORY button.

The "CH" ⑤ indicator on the MFD flashes.

3. Select the preset channels.



4. Press the MEMORY button that you want to store to memory.

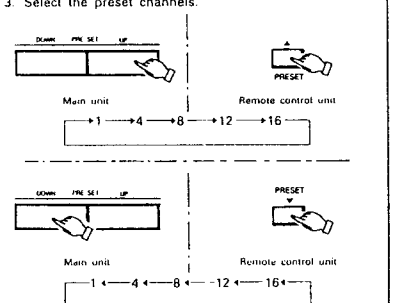


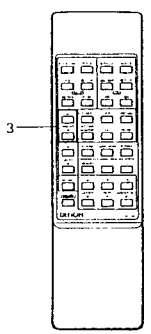
NOTES:
- The preset memory standby mode is set for 10 seconds when the MEMORY button is pressed.
- The preset memory standby mode is cancelled if any button other than preset buttons, the MEMORY button is pressed.

■ Recalling stations with the preset buttons

First store stations at the preset buttons using the above procedure.

3. Select the preset channels.





11 SURROUND PLAYBACK

■ SURROUND modes

The surround modes are as follows:

1	Dolby Pro Logic	Use this when playing program sources recorded in Dolby Surround or Dolby stereo.
2	HALL	Use this setting to create the atmosphere of a concert hall. There will be no output from the center speaker.
3	STUDIO	Use this setting to create the atmosphere of watching a live program in a studio. There will be no output from the center speaker.

- **These effects may not be very pronounced for some sources.**
- **To adjust the speaker balance for the different surround modes, first adjust for the Dolby Pro Logic Surround mode as explained on page 13, then use the position of the center level and rear level controls at this time as a guide to adjust the balance for that surround mode.**

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■ Using Dolby Pro Logic Surround

• Speaker disposition and the Dolby Pro Logic Center mode

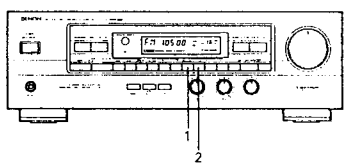
Ideally, center speakers should be used when playing sources in Dolby Pro Logic Surround. Select the center mode according to your speaker system.

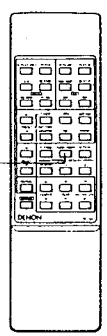
1. Set the Dolby Pro Logic mode.

2. Select the center mode.

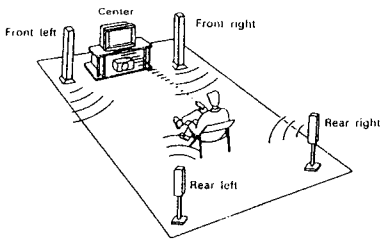
→NORMAL → PHANTOM → WIDE ←

The mode changes as shown above.





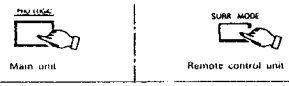
Center Mode



• Dolby 3CH. Logic (three-channel logic mode)

Select this mode when not using rear speakers.

1. Set the Dolby Pro Logic mode.



2. Press the 3CH. LOGIC button.

3CH. LOGIC
↑
PRO LOGIC

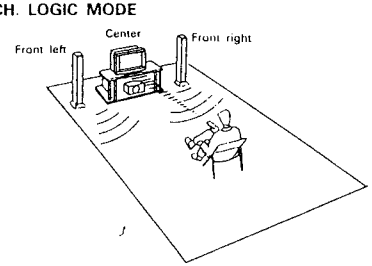
The mode changes as shown at the left.

3. Select the center mode according to your speaker system.

NORMAL ⟷ WIDE

The mode changes as shown above.

3CH. LOGIC MODE



3CH. LOGIC mode

Use this mode when rear channel speakers are not used. The rear channel information is reproduced by the front speakers.

➡ Continued

NORMAL mode

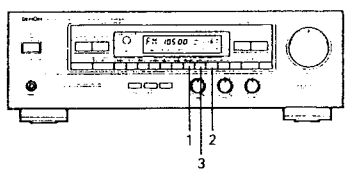
This mode is suited for an arrangement in which the center channel speaker is smaller than the left and right speakers. Signals below 100 Hz which have almost no effect on directional orientation are distributed to the left and right channels, whereas the center channel output signals greater than 100 Hz. As a result, the bass of the left and right channels increases the apparent deepness of the sound.

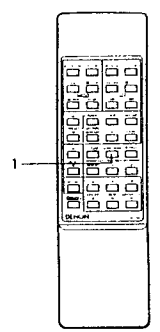
PHANTOM mode

Use this mode when center channel speaker is not used. A directional emphasis circuit provides signal reproduction which is electrically oriented to the center and this provides an exciting sound field for your enjoyment.

WIDE mode

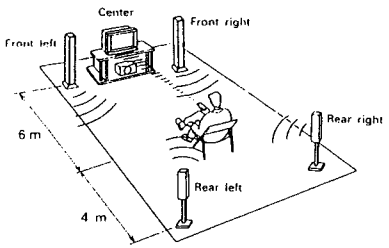
This mode is suited for an arrangement in which the center channel speaker is of the same grade as the left and right speakers. The entire sound band from low region to high is output to the center channel to provide an exciting sound field for your enjoyment.



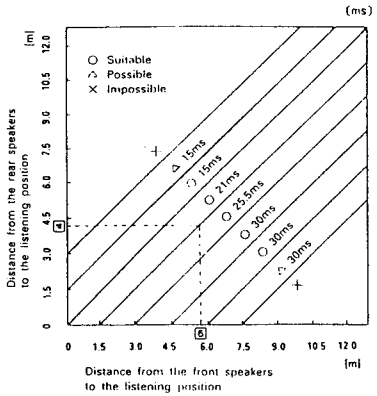


• Setting the delay time

The optimum delay time will differ depending on the listening position. Referring to the chart at right, set the optimum delay time for your room's space and seating position. For example, when the distance from the front speakers to the listening position is 6 m and that from the rear speakers to the listening position is 4 m, the optimum delay time will be 21 ms.
The variable range of the delay time differs depending on the mode.
For details about the variable range, see Page 14.



Listening position and optimum delay time for playback with Dolby Pro Logic surround



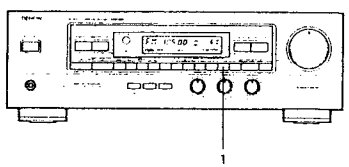
1. To increase the delay time.

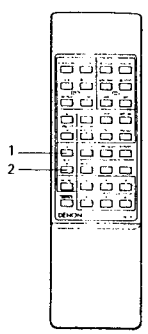
Main unit

Remote control unit

2. To decrease the delay time.

Remote control unit





- Once the delay time is set, there is no need to readjust it unless you change the speaker system or the listening position.
- It is available to memorize the adjusted values of delay time and rear (center) level for each surround mode.

➡ Continued

• Speaker volume adjustment and Dolby Pro Logic mode

To obtain the maximum surround effect, use the test tones to adjust the volume and balance of the speakers for the best balance for the listening position and so that the sound from all the speakers is heard at the same level.
Set the master volume control to a suitable level, then adjust using the following procedure.

1. Press the T.TONE button.

Remote control unit

Test tones are produced from the speakers in the order shown below, at 4 second intervals for the first two cycles, 2 second intervals after that.

→ FL → C → FR → S →

For the Dolby 3CH Logic mode:

→ FL → C → FR →

2. To increase the level of the center speakers.

Remote control unit

3. To decrease the level of the center speakers.

Remote control unit

4. To increase the level of the rear speakers.

Remote control unit

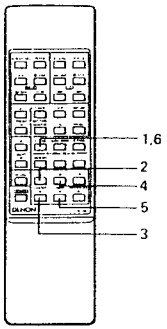
5. To decrease the level of the rear speakers.

Remote control unit

Cancelling

6. Press the T.TONE button again.

Remote control unit

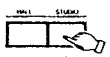


NOTES:
- The test tone will not move on to the next channel when it is being emitted from the center channel and the level of the center speakers is being adjusted, or when it is being emitted from the rear channel and the level of the rear speakers is being adjusted. It only moves on to the next channel approximately two seconds after the level key has been released.

■ Other Surround Modes

• HALL mode / STUDIO mode

1. Set the HALL mode/STUDIO mode.



Main unit

Remote control unit

- HALL
- STUDIO
- DOLBY PRO LOGIC

2. Play the desired software.

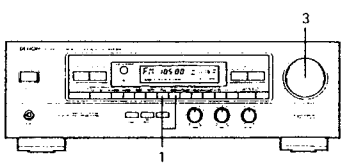
3. Adjust the volume.

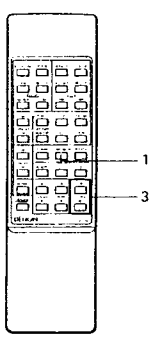
Main unit

Remote control unit

4. Adjust the level of the center and rear channels. Adjust the levels according to the source, using the Dolby Pro Logic settings as reference.

5. Adjust the delay time as desired.





■ Using the Personal Memory

Surround mode settings and the input function can be stored at personal memory buttons "1" and "2", then recalled directly from any surround mode simply by pressing button "1" or "2".

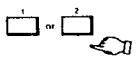
[1] Storing the setting in the personal memory

1. Set the desired surround mode and input function.
2. Press the personal memory button.

Remote control unit

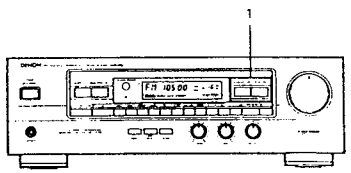
(The memory setting mode is set and the indicator on the MFD flashes.)

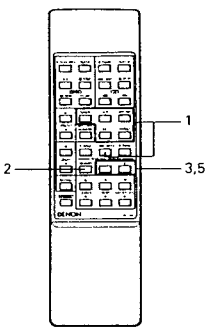
3. Press the desired personal memory button ("1" or "2").



Remote control unit

4. "M 1 (2) SET" appears on the MFD indicating that the setting has been stored.

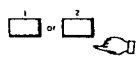




NOTE:
- The memory setting mode is set for 6 seconds. If any button other than personal memory button "1" or "2" is pressed, the memory setting mode is cancelled.

[2] Recalling the personal memory

5. Press the personal memory button ("1" or "2") at which the desired setting was stored.



Remote control unit

6. The surround mode and input function switch automatically.

NOTES:
- Personal memory buttons "1" and "2" will not function during the tape monitor mode.
- The surround mode recalled with the PERSONAL MEMORY "1" or "2" button is the same as the mode selected with the surround mode button. Thus, if the parameters of the surround mode which was stored in the memory are cleared, when the mode is recalled it is set to the initial values.
- Upon shipment from the factory, the "DOLBY PRO LOGIC" mode is stored at personal memory "1", the "HALL" mode at personal memory "2". The input function is set to VDP/DBS for both "1" and "2".
- Do not press personal memory buttons "1" or "2" buttons during recording on the cassette deck.

■ Operations Possible in the Various Surround Modes

The following is a list of the buttons and functions which can be operated during the different surround modes. Figures in parentheses indicate adjustment ranges.

		OUTPUT	CENTER LEVEL	REAR LEVEL	CENTER MODE	3CH LOGIC	TEST TONE	DELAY TIME
BYPASS		O	×	×	△*1	×	×	×
DOLBY PRO LOGIC	NORMAL	O	O (0~-24dB)	O (0~-24dB)	O	O	O	O (15~30ms)
	PHANTOM	O	×	O (0~-24dB)	O	×	O	O (15~30ms)
	WIDE	O	O (0~-24dB)	O (0~-24dB)	O	O	O	O (15~30ms)
DOLBY 3CH LOGIC	NORMAL	O	O (0~-24dB)	×	O	O	O	×
	WIDE	O	O (0~-24dB)	×	O	O	O	×
HALL		O	×	O (0~-24dB)	△*1	×	×	O (0~33ms)
STUDIO		O	×	O (0~-24dB)	△*1	×	×	O (0~33ms)

O: Operation possible ×: Operation not possible

*1 Switches to the Dolby Pro (3CH) Logic for any modes other than Dolby Pro (3CH) Logic
The level of the center and rear channels can be adjusted by 2 dB step.
The delay time can be set by 1.5 ms step.

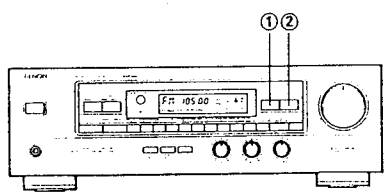
- **The sound may be distorted for some sources if the rear level is raised during surround playback. If this happens, lower the rear level.**

[12] INITIALIZATION OF THE MICROPROCESSOR

When the indication of the MFD display is not normal or when the operation of the unit does not shows the reasonable result, the initialization of the microprocessor is required by the following procedure.

1. Switch off the unit and remove the AC power cord from the wall outlet.
2. Hold the following 2 buttons of the main unit at the same time (as illustrated in the diagram below, ① AUDIO FUNCTION button, ② VIDEO FUNCTION button) and plug the power cord into the outlet.
3. Check that the entire MFD display is flashing with an interval of about 1 second, and release your fingers from the 2 buttons.
4. Switch on the unit and the microprocessor will be initialized. The input function is set to tuner with the bypass mode automatically.

NOTE:
- When the unit does not show the result of above 3 and 4, repeat the procedure from 1 again.
- When the microprocessor is initialized, all settings you have made are reset to the factory presettings.



Initial parameter values for the different modes

	OUTPUT	CENTER LEVEL	REAR LEVEL	CENTER MODE	3CH LOGIC	DELAY TIME
BYPASS	ON	—	—	—	—	—
DOLBY PRO LOGIC	ON	-12dB	-12dB	NORMAL	OFF	21msec
HALL	ON	—	-12dB	—	—	21msec
STUDIO	ON	—	-12dB	—	—	21msec

- INPUT FUNCTION : TUNER
- Reception band : FM
- Reception mode : AUTO
- Reception frequency : 87.5MHz (for North American models)
  87.50MHz (for multi-voltage models)
- PERSONAL MEMORY 1
  INPUT : VDP/DBS
  SURROUND MODE : DOLBY PROLOGIC
- PERSONAL MEMORY 2
  INPUT : VDP/DBS
  SURROUND MODE : HALL

13 TROUBLESHOOTING

If a problem should arise, first check the following:

1. **Are the connections correct?**
2. **Have you operated the amplifier according to the Operating Instructions?**
3. **Are the speakers, turntable, and other components operating properly?**

If the receiver is not operating properly, check the items listed in the table below. Should the problem persist, there may be a malfunction. Disconnect the power immediately and contact your store of purchase.

	Symptom	Cause	Measures	Page
Common problems arising when listening to the CD, records, tapes, and FM broadcasts, etc.	MFD not lit and sound not produced when power switch set to on.	• Power cord not plugged in securely.	• Check the insertion of the power cord plug.	5
	MFD lit but sound not produced.	• Speaker cords not securely connected. • OUTPUT button is off. • Improper position of the audio function button. • Volume control set to minimum. • MUTING is on.	• Connect securely. • Press the OUTPUT button. • Set to a suitable position. • Turn volume up to suitable level. • Switch off MUTING.	9 10 9 9 10
	-PROTECT- display appears multi-function display.	• Speaker terminals are short-circuited. • Block the ventilation holes of the set. The unit is operating at continuous high power conditions and/or inadequate ventilation.	• Switch power off, connect speakers properly, then switch power back on. • Turn off the set's power, then ventilate it well to cool it down. Once the set is cooled down, turn the power back on.	9 –
	Sound produced only from one channel.	• Incomplete connection of speaker cords. • Incomplete connection of input/output cords. • Left/right balance is off.	• Connect securely. • Connect securely. • Adjust balance knob properly.	5, 9 7, 8 9
	Positions of instruments reversed during stereo playback.	• Reverse connections of left and right speakers or left and right input/output cords.	• Check left and right connections.	8, 9
	Sound seems distorted.	• Rear level is too high.	• Set the rear level to lower level.	13, 14
	Personal memory function does not work.	• DAT/tape monitor mode set.	• Press the DAT/TAPE button to set the source.	10
When playing records	Humming noise produced when record is playing.	• Ground wire of turntable not connected properly. • Incomplete PHONO jack connection. • TV or radio transmission antenna nearby.	• Connect securely. • Connect securely. • Contact your store of purchase.	8 8 –
	Howling noise produced when volume is high.	• Turntable and speaker systems too close together. • Floor is unstable and vibrates easily.	• Separate as much as possible. • Use cushions to absorb speaker vibrations transmitted by floor. If turntable is not equipped with insulators, use audio insulators (commonly available).	– –
	Sound is distorted.	• Stylus pressure too weak. • Dust or dirt on stylus. • Cartridge defective.	• Apply proper stylus pressure. • Check stylus. • Replace cartridge.	– – –
	Volume is weak.	• MC cartridge being used.	• Replace with MM cartridge or use a head amplifier or step-up transformer.	8
Remote control unit	Receiver does not operate properly when remote control unit is used.	• Batteries dead. • Remote control unit too far from receiver. • Obstacle between receiver and remote control unit. • Different button is being pressed. • ⊕ and ⊖ ends of battery inserted in reverse.	• Replace with new batteries. • Move closer. • Remove obstacle. • Press the proper button. • Insert batteries properly.	– 6 6 6

14 LAST FUNCTION MEMORY

- This receiver is equipped with a last function memory which stores the input and output setting conditions as they were immediately before the power is switched off.
  This function eliminates the need to perform complicated resettings when the power is switched on.
- This receiver is also equipped with a back-up memory. This function provides approximately one week of memory storage with the power cord disconnected.

15 SPECIFICATIONS

- **Audio Section**

(Power amplifier)	Front (main 2ch driven)	
Rated output:	60 W + 60 W	(8 ohms, 20 Hz – 20 kHz with 0.1% THD)
(All properties shown are	CENTER (center 1ch driven)	
only for the power	60 W	(8 ohms, 20 Hz – 20 kHz with 0.1% THD
amplifier stage.)	REAR (rear 2ch driven)	
	15 W + 15 W	(8 ohms, 1 kHz with 0.5% THD)
Output terminals:	Front:	6 to 16 ohms
	Center:	8 to 16 ohms
	Rear:	8 to 16 ohms
Line input (Each line input – FRONT SP OUT)		
Input sensitivity / Impedance:	150 mV / 47 k ohms	PHONO (MM): 2.5 mV / 47 kohms
Frequency response:	10 Hz to 50 kHz:	±3 dB
Tone control range:	BASS:	±10 dB at 100 Hz
	TREBLE:	±10 dB at 10 kHz
Signal-to-noise ratio	92 dB (BYPASS)	
Phono equalizer (PHONO input – REC OUT)		
RIAA deviation:	±1 dB (20 Hz to 20 kHz)	
Signal-to-noise ratio:	74 dB (A weighting, with 5 mV input)	
Rated output / Maximum output:	150 mV / 8 V	
Distortion factor:	0.03% (1 kHz, 1 V)	

- **Tuner Section**

[FM] (note: μV at 75 ohms, 0 dBf = 1×10^{-15} W)		
Receiving Range:	87.50 MHz ~ 108.00 MHz	
Usable Sensitivity:	1.0 μV (11.2 dBf)	
50 dB Quieting Sensitivity:	MONO	1.6 μV (15.3 dBf)
	STEREO	23 μV (38.5 dBf)
Signal to Noise Ratio (IHF-A):	MONO	80 dB
	STEREO	75 dB
Total Harmonic Distortion (at 1 kHz):	MONO	0.4%
	STEREO	0.5%
[AM]		
Receiving Range:	522 kHZ ~ 1611 kHz	
Usable Sensitivity:	18 μV	
Signal to Noise Ratio:	50 dB	

- **Video Section**

Standard video jacks	
Input and output level / impedance:	1 Vp-p / 75 ohms
Frequency response:	2 Hz to 8 MHz +0, –3 dB

- **General**

Power supply:	AC 230 V, 50 Hz (for Europe model) AC 240 V, 50 Hz (for U.K. model)
Power consumption:	200 W
Maximum external dimensions:	434 (W) × 142 (H) × 325 (D) mm (17-3/32" × 5-19/32" × 12-51/64")
Weight:	9.1 kg (20 lbs 1 oz)

- **Remote control unit**

System remote control		
RC-169:	Total buttons:	36
	DENON system code	
	CD player:	6 buttons
	Cassette deck:	6 buttons
	AVR-800 fixed codes:	24 buttons
	Batteries:	R6P/AA Type (two batteries)
	External dimensions:	55 (W) × 18 (H) × 180 (D) mm (2-11/64" × 45/64" × 7-3/32")
	Weight:	110 g (Approx. 4 oz) (including batteries)

* For purposes of improvement, specifications and design are subject to change without notice.